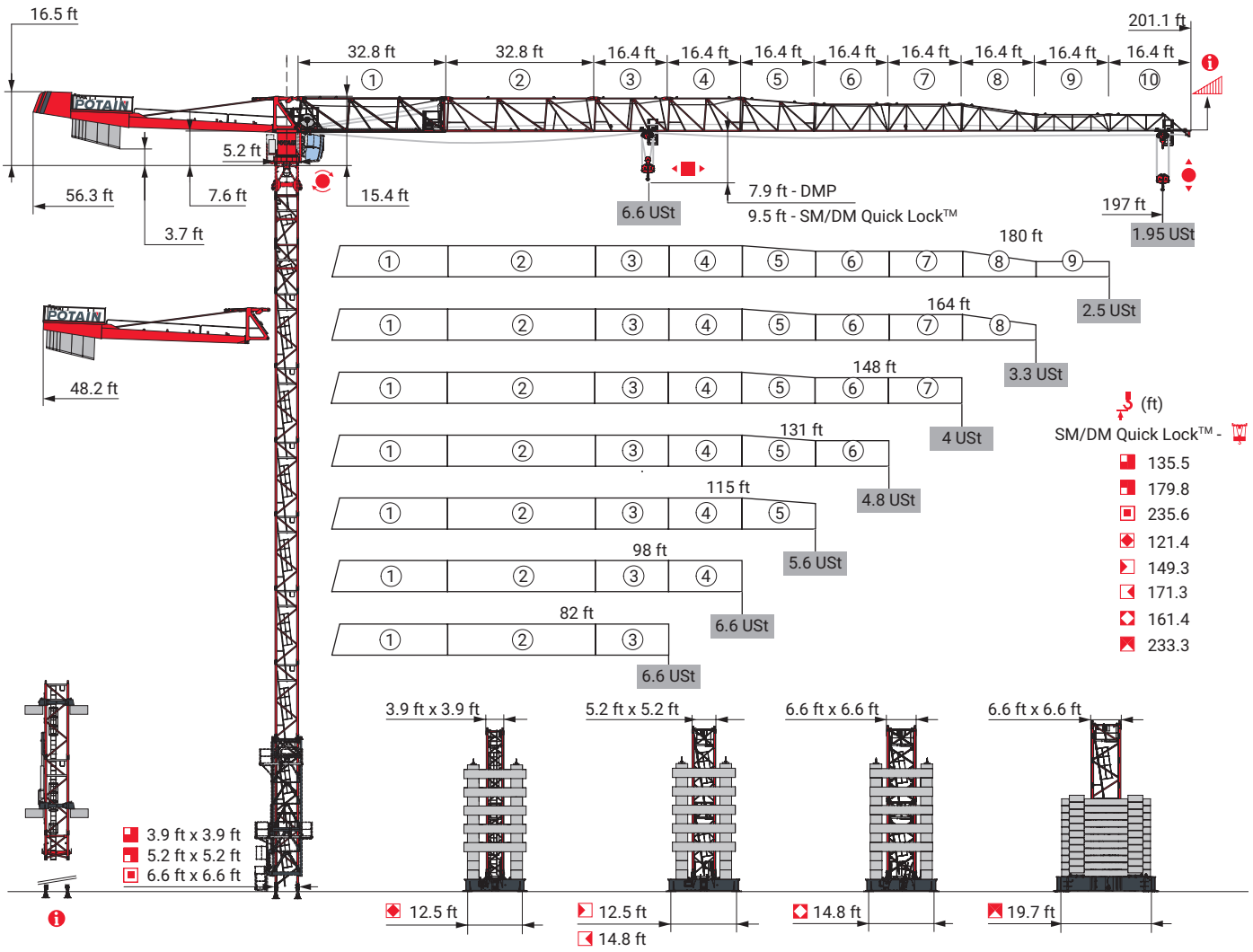
POTAIN®

MDT 159

ASME B30.3-2025



Potain Plus

Power Control

Top Site

Anti-collision systems

Automatic Rotation Control

Values have been rounded.

Mast - Reactions

3.9 ft City - P 24A								
(ft)	82	98	115	131	148	164	180	197
(ft)	135.5	119.1	119.1	119.1	119.1	119.1	135.5	135.5
/P+ (ft)	135.5	86.3	86.3	86.3	86.3	102.7	119.1	102.7
4.9 ft	1	1	1	1	1	1	1	1
16.4 ft	6	7	7	5	5	7	6	6
32.8 ft	1	0	0	1	1	0	1	1
F2 (USt) ●	148	140	142	143	145	142	166	169
F2 (USt) ■	173	114	114	117	118	130	186	197
F3 (USt) ●	121	115	117	116	118	112	134	136
F3 (USt) ■	149	90	89	90	91	104	158	168

3.9 ft City - ZC 240 -								
(ft)	82	98	115	131	148	164	180	197
(ft)	121.4	121.4	121.4	121.4	121.4	121.4	121.4	121.4
/P+ (ft)	121.4	88.6	88.6	88.6	88.6	105	121.4	105
4.9 ft	1	1	1	1	1	1	1	1
16.4 ft	7	7	5	5	5	7	5	7
32.8 ft	0	0	1	1	1	0	1	0
F1 (USt) ●	78	79	79	80	81	81	87	83
F1 (USt) ■	77	74	74	75	76	79	86	85

5.2 ft City - P 42A								
(ft)	82	98	115	131	148	164	180	197
(ft)	179.8	174.2	174.2	174.2	174.2	179.8	179.8	174.2
/P+ (ft)	179.8	174.2	174.2	174.2	174.2	179.8	179.8	174.2
10.9 ft	0	1	1	1	1	0	0	1
16.4 ft	9	8	8	8	8	9	9	8
32.8 ft	1	1	1	1	1	1	1	1
F2 (USt) ●	141	142	144	147	150	156	161	159
F2 (USt) ■	227	205	206	208	210	233	239	235
F3 (USt) ●	112	112	112	114	117	122	127	125
F3 (USt) ■	201	178	178	179	180	202	209	204

5.2 ft - P 42A								
(ft)	82	98	115	131	148	164	180	197
(ft)	175.2	170	170	170	170	175.2	170	170
/P+ (ft)	175.2	170	170	170	170	175.2	170	170
6.6 ft	1	1	1	1	1	1	1	1
10.9 ft	2	0	0	0	0	2	0	0
16.4 ft	7	8	8	8	8	7	8	8
32.8 ft	1	1	1	1	1	1	1	1
F2 (USt) ●	141	140	141	143	147	155	153	156
F2 (USt) ■	231	202	203	205	206	237	223	231
F3 (USt) ●	112	109	109	111	113	122	120	122
F3 (USt) ■	205	174	175	176	176	207	193	201

5.2 ft City - ZC 440 -								
(ft)	82	98	115	131	148	164	180	197
(ft)	149.3	144	144	144	144	144	138.5	138.5
/P+ (ft)	149.3	144	144	144	144	144	138.5	138.5
10.9 ft	0	1	1	1	1	1	2	2
16.4 ft	9	8	8	8	8	8	7	7
F1 (USt) ●	89	92	93	93	94	93	93	94
F1 (USt) ■	115	100	100	101	101	108	104	110

5.2 ft City - ZD 440 -								
(ft)	82	98	115	131	148	164	180	197
(ft)	165.7	171.3	171.3	171.3	171.3	171.3	165.7	165.7
/P+ (ft)	165.7	171.3	171.3	171.3	171.3	171.3	165.7	165.7
10.9 ft	0	2	2	2	2	2	0	0
16.4 ft	10	7	7	7	7	7	10	10
32.8 ft	0	1	1	1	1	1	0	0
F1 (USt) ●	87	93	93	93	96	96	96	97
F1 (USt) ■	121	127	127	128	129	135	127	132

Other mast compositions - Please consult us.

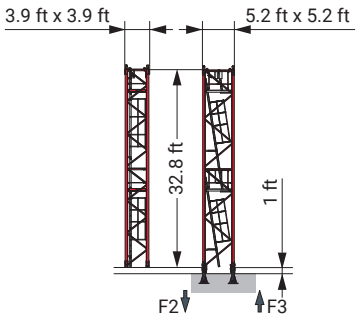
Motorized accesses: adapted mast composition, base ballast and reactions.

6.6 ft - P 63A									
(ft)		82	98	115	131	148	164	180	197
(ft)		235.6	235.6	235.6	235.6	235.6	235.6	230	230
/P+ (ft)		235.6	235.6	235.6	235.6	235.6	235.6	230	230
6.6 ft		1	1	1	1	1	1	1	1
10.9 ft		0	0	0	0	0	0	1	1
16.4 ft		12	12	12	12	12	12	11	11
32.8 ft		1	1	1	1	1	1	1	1
F2 (USt)	●	168	172	173	176	180	182	182	184
	■	386	381	383	385	387	396	383	389
F3 (USt)	●	128	131	131	133	136	138	138	140
	■	350	343	344	346	347	355	343	349

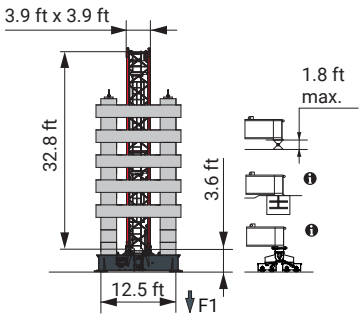
6.6 ft - ZD 640 -									
(ft)		82	98	115	131	148	164	180	197
(ft)		156.2	161.4	161.4	161.4	161.4	161.4	161.4	156.2
/P+ (ft)		156.2	161.4	161.4	161.4	161.4	161.4	161.4	156.2
6.6 ft		1	1	1	1	1	1	1	1
10.9 ft		0	2	2	2	2	2	2	0
16.4 ft		9	8	8	8	8	8	8	9
F1 (USt)	●	87	91	92	93	94	94	97	94
	■	127	132	132	133	133	139	144	136

6.6 ft - ZX 640 -									
(ft)		82	98	115	131	148	164	180	197
(ft)		233.3	233.3	233.3	233.3	233.3	233.3	233.3	227.7
/P+ (ft)		233.3	233.3	233.3	233.3	233.3	233.3	233.3	227.7
6.6 ft		1	1	1	1	1	1	1	1
10.9 ft		1	1	1	1	1	1	1	2
16.4 ft		11	11	11	11	11	11	11	10
32.8 ft		1	1	1	1	1	1	1	1
F1 (USt)	●	129	128	129	130	132	135	137	133
	■	226	222	222	224	225	230	233	226

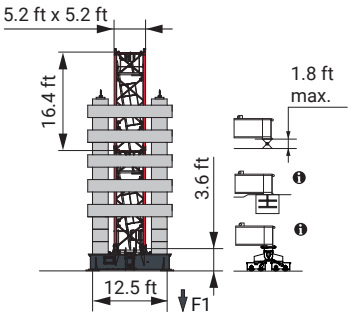
P 24A / P 42A



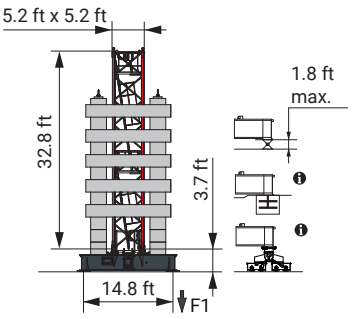
ZC 240



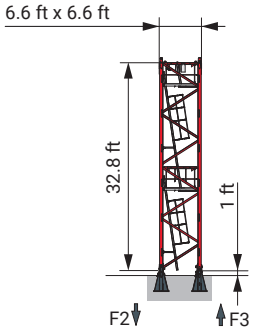
ZC 440



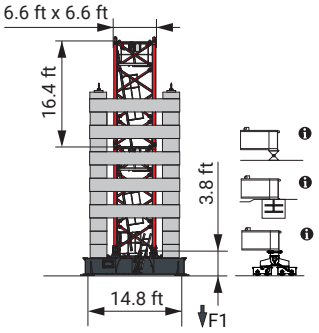
ZD 440



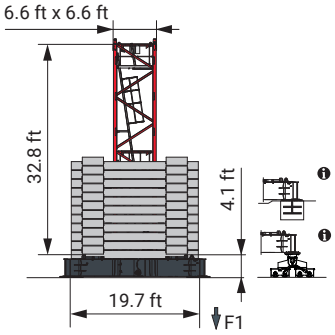
P 63A / P 800C



ZD 640



ZX 640



Base ballast

(USt) / 3.9 ft City - ZC 240 -

(ft)	82	98	115	131	148	164	180	197
121.4	110.2	110.2	110.2	110.2	110.2	110.2	121.3	110.2
105	88.2	99.2	99.2	99.2	99.2	88.2	99.2	88.2
88.6	66.1	77.2	77.2	77.2	77.2	66.1	66.1	66.1
72.2	66.1	77.2	77.2	77.2	77.2	66.1	66.1	66.1

(ft)

(USt) / 5.2 ft City - ZC 440 -

(ft)	82	98	115	131	148	164	180	197
149.3	132.3							
144	132.3	137.8	137.8	137.8	137.8	132.3		
138.5	121.3	132.3	132.3	132.3	132.3	132.3	132.3	132.3
122.1	99.2	110.2	110.2	110.2	110.2	99.2	110.2	110.2
105.6	88.2	88.2	88.2	88.2	88.2	77.2	88.2	88.2
89.2	66.1	77.2	77.2	77.2	77.2	66.1	66.1	66.1
72.8	66.1	77.2	77.2	77.2	77.2	66.1	55.1	55.1

(ft)

(USt) / 5.2 ft City - ZD 440 -

(ft)	82	98	115	131	148	164	180	197
171.3		137.8	137.8	132.3	137.8	137.8		
165.7	132.3	132.3	132.3	132.3	132.3	132.3	137.8	137.8
149.3	99.2	110.2	110.2	110.2	110.2	110.2	121.3	121.3
132.9	88.2	99.2	99.2	88.2	88.2	88.2	99.2	99.2
116.5	66.1	77.2	77.2	77.2	77.2	66.1	77.2	77.2
100.1	55.1	66.1	66.1	66.1	66.1	55.1	55.1	55.1
83.7	44.1	55.1	55.1	55.1	55.1	44.1	44.1	44.1

(ft)

(USt) / 6.6 ft - ZD 640 -

(ft)	82	98	115	131	148	164	180	197
161.4		132.3	132.3	132.3	132.3	132.3	137.8	
156.2	132.3	121.3	121.3	121.3	121.3	121.3	132.3	132.3
139.8	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
123.4	77.2	88.2	88.2	88.2	77.2	77.2	77.2	77.2
107	66.1	66.1	66.1	66.1	66.1	55.1	66.1	66.1
90.6	44.1	55.1	55.1	55.1	55.1	44.1	44.1	44.1
74.2	44.1	55.1	55.1	55.1	44.1	44.1	33.1	33.1

(ft)

(USt) / 6.6 ft - ZX 640 -

(ft)	82	98	115	131	148	164	180	197
233.3	242.5	231.5	231.5	231.5	231.5	242.5	242.5	
227.7	231.5	220.5	220.5	220.5	220.5	231.5	231.5	231.5
211.3	187.4	176.4	176.4	176.4	176.4	187.4	187.4	198.4
194.9	154.3	143.3	143.3	143.3	143.3	143.3	154.3	154.3
178.5	110.2	110.2	99.2	99.2	99.2	110.2	110.2	121.3
162.1	77.2	77.2	77.2	66.1	66.1	77.2	77.2	88.2
145.7	55.1	55.1	55.1	55.1	55.1	55.1	55.1	55.1
129.3	44.1	44.1	44.1	44.1	44.1	33.1	44.1	44.1
112.9	33.1	33.1	33.1	33.1	33.1	22.1	22.1	22.1
96.5	22.1	22.1	22.1	22.1	22.1	11	11	11
80.1	11	22.1	22.1	11	11	11	11	11

(ft)

Load curves

SM/DM Quick Lock™

(ft)			72	82	89	98	105	115	121	131	138	148	154	164	171	180	187	197	ft
	6.6 USt	3.3 USt																	
197	7.2 → 74.3	124.4 - 127.1	6.6	5.8	5.3	4.6	4.2	3.7	3.4	3.2	2.95	2.7	2.5	2.3	2.2	2	1.9	1.75	USt
	7.2 → 79.3	132.6 - 135.4	6.6	6.3	5.7	5	4.6	4	3.7	3.4	3.2	2.95	2.75	2.55	2.4	2.2	2.1	1.95	USt P+
180	7.2 → 77.7	134.3 - 137.8	6.6	6.2	5.6	4.9	4.5	4.1	3.8	3.4	3.3	3	2.85	2.6	2.5	2.3	USt		
	7.2 → 83.7	142.7 - 145.9	6.6	6.6	6.2	5.4	5	4.4	4.1	3.7	3.5	3.3	3.1	2.85	2.7	2.5	USt P+		
164	7.2 → 83.2	146.8 - 150.9	6.6	6.6	6.1	5.4	5	4.5	4.2	3.8	3.6	3.3	3.2	2.95	USt				
	7.2 → 89.9	158.1 - 161.9	6.6	6.6	6.6	5.9	5.5	4.9	4.6	4.2	3.9	3.6	3.4	3.3	USt P+				
148	7.2 → 90.4		6.6	6.6	6.6	6	5.5	5	4.6	4.2	4	3.6	USt						
	7.2 → 97.6		6.6	6.6	6.6	6.5	6.1	5.4	5.1	4.6	4.3	4	USt P+						
131	7.2 → 92.4		6.6	6.6	6.6	6.1	5.7	5.1	4.8	4.4	USt								
	7.2 → 97.6		6.6	6.6	6.6	6.6	6.1	5.5	5.2	4.7	USt P+								
115	7.2 → 93		6.6	6.6	6.6	6.2	5.7	5.1	USt										
	7.2 → 98.4		6.6	6.6	6.6	6.6	6.1	5.5	USt P+										
98	7.2 → 93		6.6	6.6	6.6	6.1	USt												
	7.2 → 97.3		6.6	6.6	6.6	6.5	USt P+												
82	7.2 → 82		6.6	6.6	USt														
	7.2 → 82		6.6	6.6	USt P+														

= - 0.11 USt max.

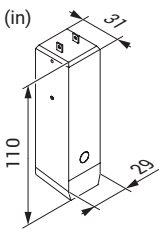
DMP

(ft)		72	82	89	98	105	115	121	131	138	148	154	164	171	180	187	197	ft
	6.6 USt																	
197	7.2 → 74.5	6.6	5.8	5.3	4.6	4.2	3.7	3.4	3.1	2.85	2.6	2.45	2.2	2.1	1.9	1.8	1.65	USt
	7.2 → 79.6	6.6	6.4	5.7	5	4.6	4	3.7	3.4	3.1	2.85	2.65	2.4	2.3	2.1	2	1.8	USt P+
180	7.2 → 77.4	6.6	6.2	5.6	4.9	4.5	4	3.8	3.4	3.2	2.9	2.75	2.5	2.4	2.2	USt		
	7.2 → 83.6	6.6	6.6	6.2	5.4	5	4.4	4.1	3.7	3.5	3.2	3	2.75	2.6	2.4	USt P+		
164	7.2 → 83.6	6.6	6.6	6.2	5.4	5	4.5	4.2	3.8	3.6	3.3	3.1	2.85	USt				
	7.2 → 90.1	6.6	6.6	6.6	5.9	5.5	4.9	4.6	4.2	3.9	3.6	3.4	3.2	USt P+				
148	7.2 → 90.4	6.6	6.6	6.6	6	5.5	5	4.6	4.2	4	3.6	USt						
	7.2 → 97.5	6.6	6.6	6.6	6.5	6.1	5.4	5.1	4.6	4.3	4	USt P+						
131	7.2 → 92.4	6.6	6.6	6.6	6.1	5.7	5.1	4.8	4.4	USt								
	7.2 → 98.6	6.6	6.6	6.6	6.6	6.2	5.6	5.2	4.8	USt P+								
115	7.2 → 93	6.6	6.6	6.6	6.2	5.7	5.1	USt										
	7.2 → 98.5	6.6	6.6	6.6	6.6	6.2	5.6	USt P+										
98	7.2 → 93	6.6	6.6	6.6	6.1	USt												
	7.2 → 98.4	6.6	6.6	6.6	6.6	USt P+												
82	7.2 → 82	6.6	6.6	USt														
	7.2 → 82	6.6	6.6	USt P+														

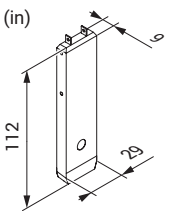
Jib weight and counter-jib ballast

	(lb) (+/- 5%)	7,937 lb	2,425 lb	(lb)
197 ft	19,621	3	4	33,510
180 ft	19,180	3	4	33,510
164 ft	18,519	3	4	33,510
148 ft	17,857	3	4	33,510
131 ft	17,196	3	3	31,085
115 ft	16,094	3	2	28,660
98 ft	15,212	3	1	26,235
82 ft	14,330	2	2	20,723

CAU - 7,937 lb



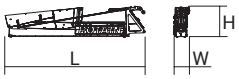
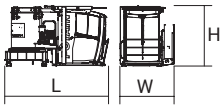
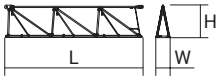
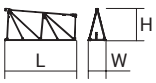
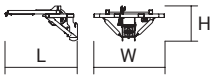
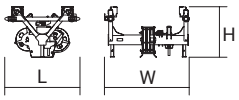
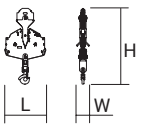
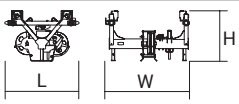
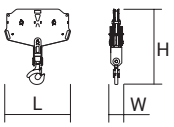
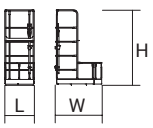
CAV - 2,425 lb

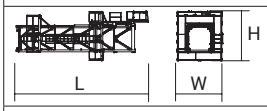
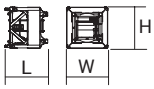
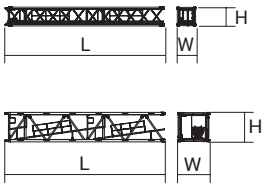
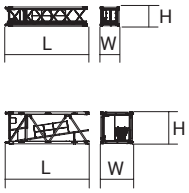
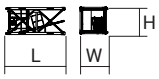
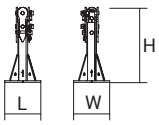
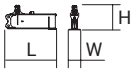
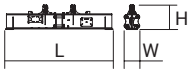
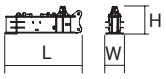


Dimensions and weight

Slewing crane part - 197 ft - SM/DM Quick Lock™ - 33 LVF

x 3
x 3

Slewing crane part			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
	Counter-jib		38.9	4.4	8.2	11,023
	Towerhead + cab	Ultra View	14.2	7.4	8.1	13,338
	Jib section	① 33 LVF 6 DVF	36	9.5	8.5	8,377
	Jib section	②	33.6	3.4	7.8	3,217
	Jib section	③ ④ ⑥ ⑦ ⑨	17.1 17 17 17 16.9	3.4 3.4 3.4 3.4 3.4	7.7 7.6 6.3 6.2 3.9	1,336 1,283 886 756 503
	Jib section	⑤ ⑧	17 16.9	3.4 3.4	7.6 6.2	990 646
	Jib section	⑩	16.7	3.4	3.8	417
	Jib section		4.1	4	2	225
	Trolley	SM/DM Quick Lock™ 6.6 USt	3.8	4.3	2.5	399
	Pulley block	SM/DM Quick Lock™ 6.6 USt	2.9	0.9	5.4	401
	Trolley	DMP 6.6 USt	3.8	4.3	2.5	399
	Pulley block	DMP 6.6 USt	2.9	0.6	3.4	291
	Trolley inspection platform		2.2	3.5	5.7	99

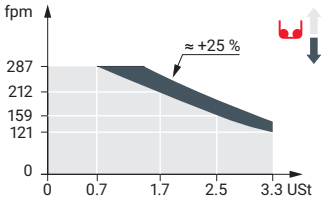
Crane tower			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
	T 41	⍁ 5.2 ft	35.6	12.3	13.5	15,653
	T 61	⍁ 6.6 ft	35.5	13.6	14.7	21,385
	K20/K40	⍁ 3.9/5.2 ft	5.6	5.4	5.4	4,189
	K40/K40-2	⍁ 5.2 ft	7.3	6.9	6.8	2,932
	K60/K40-2	⍁ 6.6/5.2 ft	7.3	8.2	8.1	5,820
	KM 247E	⍁ 3.9 ft	33.5	4	4	7,165
	KRM 249E	⍁ 3.9 ft	33.5	4	4	9,204
	K 447E	⍁ 5.2 ft	33.5	5.3	5.3	7,474
	KM 447E	⍁ 5.2 ft	33.5	5.3	5.3	7,088
	KRM 449E	⍁ 5.2 ft	33.5	5.3	5.3	9,370
	K 649B	⍁ 6.6 ft	33.6	6.8	6.7	11,663
	KM 649E	⍁ 6.6 ft	33.8	6.7	6.7	10,692
	KRM 6410B	⍁ 6.6 ft	33.6	6.9	6.8	15,653
	KM 247A	⍁ 3.9 ft	17.1	4	4	3,748
	KM 249A	⍁ 3.9 ft	17.1	4	4	4,630
	K 447A	⍁ 5.2 ft	17.1	5.5	5.3	4,079
	KMT 447A	⍁ 5.2 ft	17.1	5.5	5.3	3,847
	K 449A	⍁ 5.2 ft	17.1	5.5	5.3	4,916
	KMT 449A	⍁ 5.2 ft	17.1	5.5	5.3	4,696
	KR 649A	⍁ 6.6 ft	17.2	6.9	6.8	7,165
	KRMT 649A	⍁ 6.6 ft	17.2	6.9	6.8	6,724
	K 649A	⍁ 6.6 ft	17.2	6.8	6.7	6,184
	KMT 649A	⍁ 6.6 ft	17.2	6.8	6.7	5,666
	KMT 447C	⍁ 5.2 ft	11.6	5.5	5.3	2,976
	KRMT 649C	⍁ 6.6 ft	11.7	6.9	6.8	5,401
	Fixing angles	P 24A / P 42A	1.8	1.8	3.8	529
		P 63A / P 800C	2.5	2.5	4.2	1,025
	1/2 Cross girder	ZC 240	9.2	1.9	4.3	2,447
		ZC 440	9.2	1.9	4.3	2,447
		ZD 440	10.8	1.9	4.4	2,778
		ZD 640	10.8	1.9	4.7	2,976
	Cross girder	ZC 240	19	2.7	4.3	5,997
		ZC 440	19	2.8	4.3	5,997
		ZD 440	22.2	2.8	4.3	6,702
		ZD 640	22.2	1	4.7	7,055
	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	
	33 LVF 15 Optima	fpm	121	159	212	287	61	80	105	144	33	22	1,001 ft
		USt	3.3	2.5	1.7	0.7	6.6	5	3.3	1.4			
	6 DVF 4 Optima	fpm	0 → 262 (6.6 USt)				0 → 328 (2.2 USt)				5.5	4	
	RVF 152 Optima+	rpm	0 → 0.8								2 x 5.5	2 x 4	

IEC 60204-32	kVA
480 V (+6% -10%) 60 Hz	41 → 28 kVA

33 LVF 15 Optima



The reactions and mast compositions presented in this data sheet meet the specifications of EN 14439:2025 and ASME B30.3-2025 standards.
The “out of service” wind profile is determined in accordance with ASCE 7-22 and ASCE 37-25 specifications as follow:
The “standard” design wind is determined from an ultimate reference wind speed of 115 mph (185 kph) corresponding to an average recurrence interval of 700 years, calculated for an Exposure C category, and combined with a 0.85 reduction factor based on the assumption that the crane is considered as a temporary construction structure used for 2 years or less.
As a result, this “standard” wind profile is covered by the EN 14439:2025 C25 wind profile, which is used to determine all technical data provided in this document.

- 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
- Jib 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.

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