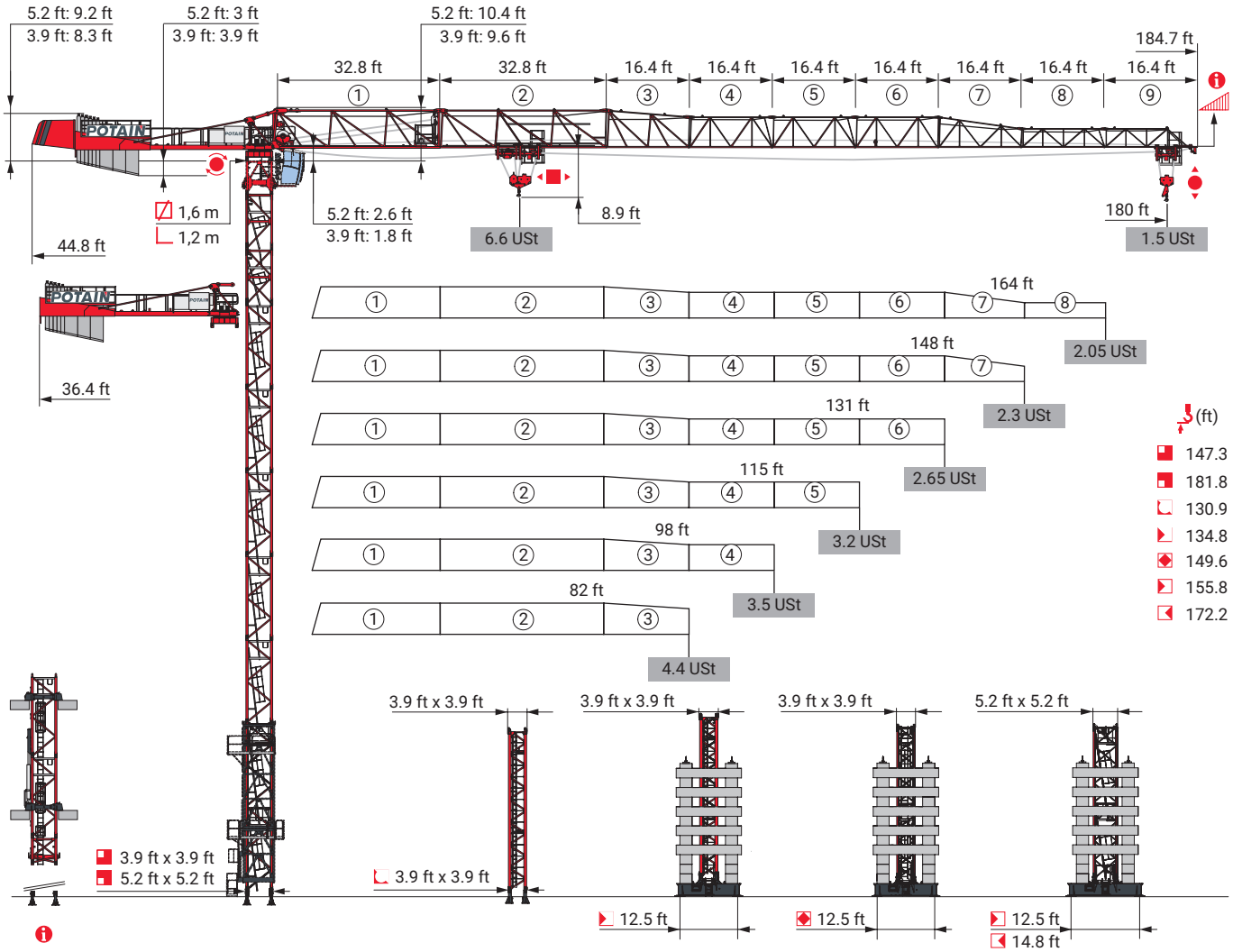
POTAIN®

MDT 109

ASME B30.3-2025



Potain Plus

Power Control

Top Site

Anti-collision systems

Automatic Rotation Control

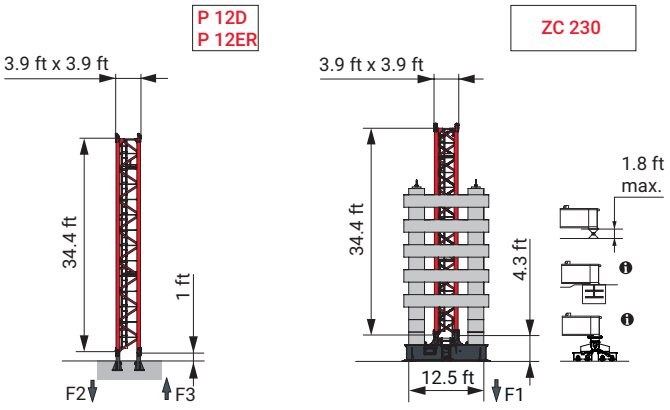
Values have been rounded.

Mast - Reactions

3.9 ft City - P 12D								
(ft)		82	98	115	131	148	164	180
(ft)		106.3	106.3	106.3	106.3	96.5	96.5	106.3
/P+ (ft)		106.3	106.3	106.3	106.3	96.5	96.5	106.3
9.8 ft		1	1	1	1	0	0	1
34.4 ft		3	3	3	3	3	3	3
F2 (USt)	●	103	103	101	103	96	97	110
	■	120	120	121	124	103	104	125
F3 (USt)	●	80	80	77	78	71	72	83
	■	100	100	100	103	81	81	101

3.9 ft City - P 12ER								
(ft)		82	98	115	131	148	164	180
(ft)		130.9	130.9	130.9	130.9	130.9	130.9	130.9
/P+ (ft)		130.9	130.9	130.9	130.9	130.9	130.9	130.9
34.4 ft		4	4	4	4	4	4	4
F2 (USt)	●	131	130	128	132	134	136	140
	■	197	198	199	203	206	208	199
F3 (USt)	●	106	105	102	105	107	108	111
	■	176	177	177	180	182	183	174

3.9 ft City - ZC 230 -								
(ft)		82	98	115	131	148	164	180
(ft)		134.8	134.8	134.8	134.8	134.8	134.8	134.8
/P+ (ft)		134.8	134.8	134.8	134.8	134.8	134.8	134.8
34.4 ft		4	4	4	4	4	4	4
F1 (USt)	●	83	83	82	84	85	86	87
	■	120	120	121	123	125	125	120



Other mast compositions - Please consult us.

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

3.9 ft City - P 24A

(ft)	82	98	115	131	148	164	180
(ft)	147.3	147.3	147.3	147.3	147.3	147.3	147.3
/P+ (ft)	147.3	147.3	147.3	147.3	147.3	147.3	147.3
4.9 ft	1	1	1	1	1	1	1
16.4 ft	7	7	7	7	7	7	7
32.8 ft	1	1	1	1	1	1	1
F2 (USt) ●	144	144	141	145	149	151	158
F2 (USt) ■	207	208	210	214	218	220	218
F3 (USt) ●	117	117	114	117	119	121	127
F3 (USt) ■	184	185	185	189	192	193	190

3.9 ft City - ZC 240 -

(ft)	82	98	115	131	148	164	180
(ft)	149.6	149.6	149.6	149.6	149.6	149.6	133.2
/P+ (ft)	149.6	149.6	149.6	149.6	149.6	149.6	133.2
4.9 ft	1	1	1	1	1	1	1
16.4 ft	7	7	7	7	7	7	8
32.8 ft	1	1	1	1	1	1	0
F1 (USt) ●	86	86	86	87	88	90	83
F1 (USt) ■	120	121	122	124	126	127	98

5.2 ft City - P 42A

(ft)	82	98	115	131	148	164	180
(ft)	180.5	180.5	180.5	180.5	180.5	180.5	180.5
/P+ (ft)	180.5	180.5	180.5	180.5	180.5	180.5	180.5
10.9 ft	2	2	2	2	2	2	2
16.4 ft	8	8	8	8	8	8	8
32.8 ft	1	1	1	1	1	1	1
F2 (USt) ●	127	127	125	129	131	133	139
F2 (USt) ■	226	227	228	233	235	236	235
F3 (USt) ●	99	98	96	99	100	101	106
F3 (USt) ■	201	201	202	206	207	207	206

5.2 ft - P 42A

(ft)	82	98	115	131	148	164	180
(ft)	181.8	176.2	181.8	176.2	176.2	176.2	176.2
/P+ (ft)	181.8	176.2	181.8	176.2	176.2	176.2	176.2
6.6 ft	1	1	1	1	1	1	1
10.9 ft	0	1	0	1	1	1	1
16.4 ft	9	8	9	8	8	8	8
32.8 ft	1	1	1	1	1	1	1
F2 (USt) ●	130	126	128	127	129	131	137
F2 (USt) ■	236	226	238	230	232	234	233
F3 (USt) ●	101	97	97	96	98	99	104
F3 (USt) ■	211	200	211	202	204	205	203

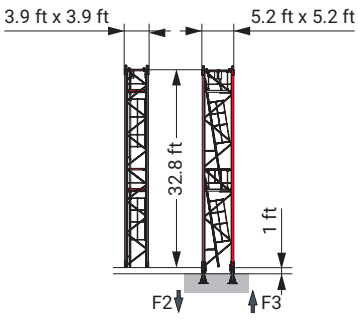
5.2 ft City - ZC 440 -

(ft)	82	98	115	131	148	164	180
(ft)	155.8	155.8	155.8	155.8	155.8	155.8	155.8
/P+ (ft)	155.8	155.8	155.8	155.8	155.8	155.8	155.8
10.9 ft	1	1	1	1	1	1	1
16.4 ft	9	9	9	9	9	9	9
F1 (USt) ●	85	85	85	86	87	88	91
F1 (USt) ■	125	125	125	128	129	130	129

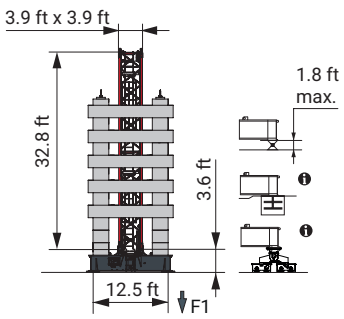
5.2 ft City - ZD 440 -

(ft)	82	98	115	131	148	164	180
(ft)	172.2	172.2	172.2	172.2	172.2	172.2	172.2
/P+ (ft)	172.2	172.2	172.2	172.2	172.2	172.2	172.2
10.9 ft	1	1	1	1	1	1	1
16.4 ft	10	10	10	10	8	8	10
32.8 ft	0	0	0	0	1	1	0
F1 (USt) ●	85	85	84	86	87	88	89
F1 (USt) ■	130	130	130	133	134	135	133

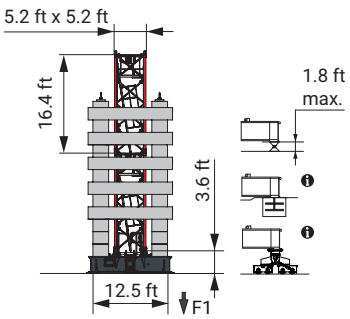
P 24A / P 42A



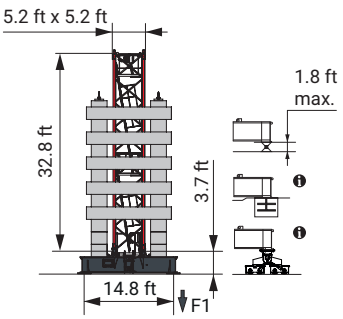
ZC 240



ZC 440



ZD 440



Anchorages

Base ballast

(USt) / 3.9 ft City - ZC 230 -

(ft)	82	98	115	131	148	164	180
134.8	132.3	132.3	132.3	132.3	132.3	132.3	132.3
100.4	66.1	66.1	66.1	66.1	66.1	66.1	77.2
65.9	33.1	33.1	33.1	33.1	33.1	44.1	44.1

(ft)

(USt) / 3.9 ft City - ZC 240 -

(ft)	82	98	115	131	148	164	180
149.6	132.3	132.3	132.3	132.3	132.3	132.3	
133.2	99.2	99.2	99.2	99.2	110.2	110.2	121.3
116.8	77.2	77.2	77.2	77.2	77.2	77.2	88.2
100.4	66.1	55.1	55.1	55.1	55.1	66.1	66.1
84	44.1	44.1	44.1	44.1	44.1	44.1	55.1
67.6	33.1	33.1	33.1	33.1	33.1	44.1	44.1

(ft)

(USt) / 5.2 ft City - ZC 440 -

(ft)	82	98	115	131	148	164	180
155.8	132.3	132.3	132.3	132.3	132.3	132.3	137.8
139.4	99.2	99.2	99.2	99.2	99.2	99.2	110.2
123	77.2	77.2	77.2	77.2	77.2	77.2	88.2
106.6	66.1	66.1	55.1	55.1	66.1	66.1	66.1
90.2	44.1	44.1	44.1	44.1	44.1	44.1	55.1
73.8	33.1	33.1	33.1	33.1	33.1	44.1	44.1

(ft)

(USt) / 5.2 ft City - ZD 440 -

(ft)	82	98	115	131	148	164	180
172.2	137.8	137.8	132.3	137.8	137.8	137.8	132.3
155.8	110.2	99.2	99.2	99.2	110.2	99.2	110.2
139.4	77.2	77.2	77.2	77.2	77.2	77.2	88.2
123	55.1	55.1	55.1	55.1	55.1	55.1	66.1
106.6	44.1	44.1	44.1	44.1	44.1	44.1	55.1
90.2	33.1	33.1	33.1	33.1	33.1	33.1	33.1
73.8	22.1	22.1	22.1	22.1	22.1	33.1	33.1

(ft)

Load curves

(ft)			49	56	66	72	82	89	98	105	115	121	131	138	148	154	164	171	180	ft
	6.6 USt	3.3 USt																		
180	9.2 → 53.8	97.5 - 108.3	6.6	6.3	5.3	4.7	4.1	3.7	3.3	3.3	3.1	2.9	2.65	2.5	2.2	2.05	1.8	1.6	1.4	USt
	9.2 → 53.8	97.4 - 108.3	6.6	6.3	5.3	4.7	4.1	3.7	3.3	3.3	3.1	2.9	2.65	2.5	2.3	2.1	1.85	1.7	1.5	USt P+
164	9.2 → 53.5	96.9 - 108.3	6.6	6.3	5.3	4.7	4	3.7	3.3	3.3	3.1	2.9	2.65	2.5	2.3	2.2	2.05	USt		
	9.2 → 53.5	96.9 - 108.3	6.6	6.3	5.3	4.7	4	3.7	3.3	3.3	3.1	2.9	2.65	2.5	2.3	2.2	2.05	USt P+		
148	9.2 → 53.8	97.2 - 108.3	6.6	6.3	5.3	4.7	4.1	3.7	3.3	3.3	3.1	2.9	2.65	2.5	2.3	USt				
	9.2 → 53.8	97.2 - 108.3	6.6	6.3	5.3	4.7	4.1	3.7	3.3	3.3	3.1	2.9	2.65	2.5	2.3	USt P+				
131	9.2 → 54.5	97 - 108.3	6.6	6.4	5.3	4.7	4	3.7	3.3	3.3	3.1	2.9	2.65	USt						
	9.2 → 54.5	97 - 108.3	6.6	6.4	5.3	4.7	4	3.7	3.3	3.3	3.1	2.9	2.65	USt P+						
115	9.2 → 55.1	99.5 - 110.2	6.6	6.4	5.4	4.8	4.2	3.8	3.3	3.3	3.2	USt								
	9.2 → 55.1	99.5 - 110.2	6.6	6.4	5.4	4.8	4.2	3.8	3.3	3.3	3.2	USt P+								
98	9.2 → 56.8		6.6	6.6	5.6	4.9	4.2	3.8	3.3	USt										
	9.2 → 56.8		6.6	6.6	5.6	4.9	4.2	3.8	3.3	USt P+										
82	9.2 → 56.8		6.6	6.6	5.6	4.9	4.2	USt												
	9.2 → 56.8		6.6	6.6	5.6	4.9	4.2	USt P+												

= - 0.43 USt max.

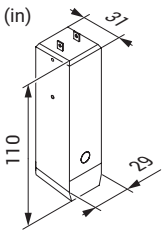
(ft)			49	56	66	72	82	89	98	105	115	121	131	138	148	154	164	171	180	ft
	6.6 USt	3.3 USt																		
180	7.2 → 55.1	102.7 - 105	6.6	6.5	5.5	4.9	4.3	3.9	3.5	3.3	2.95	2.75	2.5	2.35	2.1	1.9	1.65	1.45	1.3	USt
	7.2 → 55.1	102.6 - 105	6.6	6.5	5.5	4.9	4.3	3.9	3.5	3.3	2.95	2.75	2.5	2.35	2.15	1.95	1.75	1.55	1.35	USt P+
164	7.2 → 55.1	102.1 - 103.8	6.6	6.5	5.5	4.9	4.3	3.9	3.4	3.3	2.95	2.75	2.5	2.35	2.15	2.05	1.9	USt		
	7.2 → 55.1	102.1 - 103.8	6.6	6.5	5.5	4.9	4.3	3.9	3.4	3.3	2.95	2.75	2.5	2.35	2.15	2.05	1.9	USt P+		
148	7.2 → 55.1	102.4 - 104	6.6	6.5	5.5	4.9	4.3	3.9	3.5	3.3	2.95	2.75	2.5	2.35	2.15	USt				
	7.2 → 55.1	102.4 - 104	6.6	6.5	5.5	4.9	4.3	3.9	3.5	3.3	2.95	2.75	2.5	2.35	2.15	USt P+				
131	7.2 → 55.8	102.1 - 103.8	6.6	6.6	5.5	4.9	4.3	3.9	3.5	3.3	2.95	2.75	2.5	USt						
	7.2 → 55.8	102.1 - 103.8	6.6	6.6	5.5	4.9	4.3	3.9	3.5	3.3	2.95	2.75	2.5	USt P+						
115	7.2 → 56.8	104.7 - 106.5	6.6	6.6	5.6	5.1	4.4	4	3.6	3.3	3	USt								
	7.2 → 56.8	104.7 - 106.5	6.6	6.6	5.6	5	4.4	4	3.6	3.3	3	USt P+								
98	7.2 → 58.4		6.6	6.6	5.8	5.1	4.4	4	3.5	USt										
	7.2 → 58.4		6.6	6.6	5.8	5.1	4.4	4	3.5	USt P+										
82	7.2 → 58.4		6.6	6.6	5.8	5.1	4.4	USt												
	7.2 → 58.4		6.6	6.6	5.8	5.1	4.4	USt P+												

= - 0.09 USt max.

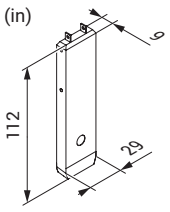
Jib weight and counter-jib ballast

	(lb) (+/- 5%)					
				7,937 lb	2,425 lb	(lb)
180 ft	17,327	17,063	17,709	3	6	38,360
164 ft	16,895	16,631	17,277	3	5	35,935
148 ft	16,377	16,113	16,759	3	4	33,510
131 ft	15,720	15,456	16,102	3	3	31,085
115 ft	14,960	14,695	15,341	3	2	28,660
98 ft	14,398	14,133	14,779	3	1	26,235
82 ft	13,767	13,502	14,148	3	0	23,810

CAU - 7,937 lb



CAV - 2,425 lb

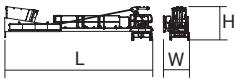
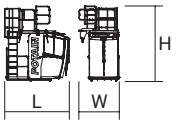
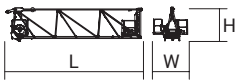
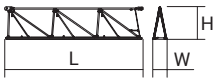
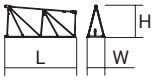
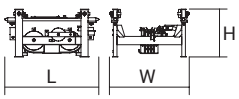
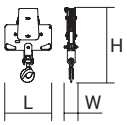
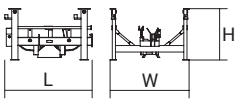
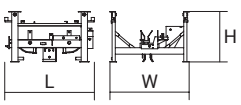
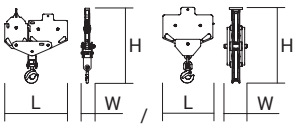


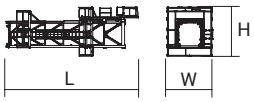
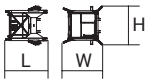
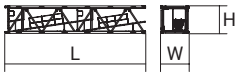
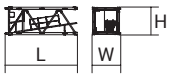
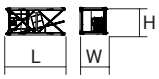
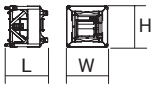
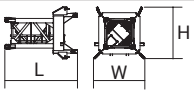
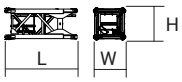
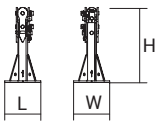
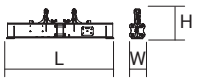
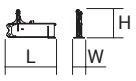
Dimensions and weight

Slewing crane part - 180 ft - 33 LVF

x 3

x 3

Slewing crane part			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
	Counter-jib	3.9 ft	39.2	6.8	8.1	12,302
		5.2 ft	39.2	7.1	8.9	12,633
	Cab	Ultra View	10.4	6.5	11.9	2,194
	Jib section	① 33 LVF 6 DVF	34.8	8.8	8.6	7,693
	Jib section	④	17	3.4	6.3	886
		⑤	17	3.4	6.3	756
		⑥	17	3.4	6.2	756
		⑧	16.9	3.4	3.9	503
	Jib section	②	33.5	3.4	7.7	3,025
	Jib section	③	17	3.4	7.6	992
		⑦	16.9	3.4	6.2	646
	Jib section	⑨	16.7	3.4	3.8	417
	Trolley	6.6 USt	5.2	4.4	2.9	617
	Pulley block	6.6 USt	3	0.9	4.3	628
	Trolley	6.6 USt	4.6	4.1	3.1	617
	Trolley	6.6 USt	4.7	4.1	3.1	617
		3.3 USt	5	4.3	3.1	518
	Pulley block	6.6 USt	4.1	0.9	5	551
		3.3 USt	2.6	0.7	4.2	287

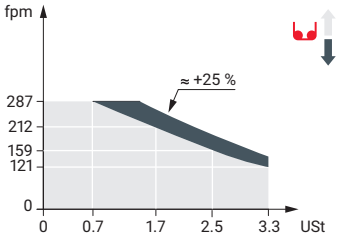
Crane tower			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
	T 41	⍁ 5.2 ft	35.6	12.3	13.5	15,653
	K40/K40-2	⍁ 5.2 ft	7.3	6.9	6.8	2,932
	K 447E KM 447E KRM 449E	⍁ 5.2 ft	33.5 33.5 33.5	5.3 5.3 5.3	5.3 5.3 5.3	7,474 7,088 9,370
	K 447A KMT 447A K 449A KMT 449A	⍁ 5.2 ft	17.1 17.1 17.1 17.1	5.5 5.5 5.5 5.5	5.3 5.3 5.3 5.3	4,079 3,847 4,916 4,696
	KMT 447C		11.6	5.5	5.3	2,976
	K20/K40	⍁ 3.9 ft / ⍁ 5.2 ft	5.6	5.4	5.4	4,189
	KM 247E KRM 249E	⍁ 3.9 ft	33.5 33.5	4 4	4 4	7,165 9,204
	KM 247A KM 249A		17.1 17.1	4 4	4 4	3,748 4,630
	K40/L20-2	⍁ 5.2 ft / ∟ 3.9 ft	9.7	6.8	6.9	4,630
	K20/S20	⍁ 3.9 ft / ∟ 3.9 ft	9.6	4.2	4.2	2,535
	S 28ES-2 SR 26E-2 SR 28ER-2	∟ 3.9 ft	35.3 35.3 35.3	4.2 4.2 4.2	4.2 4.2 4.2	7,604 6,735 9,050
	SR 26X-2		10.7	4.1	4.1	2,169
	Fixing angles	P 12D P 12ER P 24A / P 42A	1.6 2.6 1.8	1.6 2.6 1.8	3.7 4.3 3.8	357 926 529
	Cross girder	ZC 230 ZC 240 ZC 440 ZD 440	19 19 19 22.2	2.7 2.7 2.8 2.8	5.3 4.3 4.3 4.3	5,445 5,997 5,997 6,702
	1/2 Cross girder	ZC 230 ZC 240 ZC 440 ZD 440	9.3 9.2 9.2 10.8	1.9 1.9 1.9 1.9	5.3 4.3 4.3 4.4	2,194 2,447 2,447 2,778

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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MDT 109

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