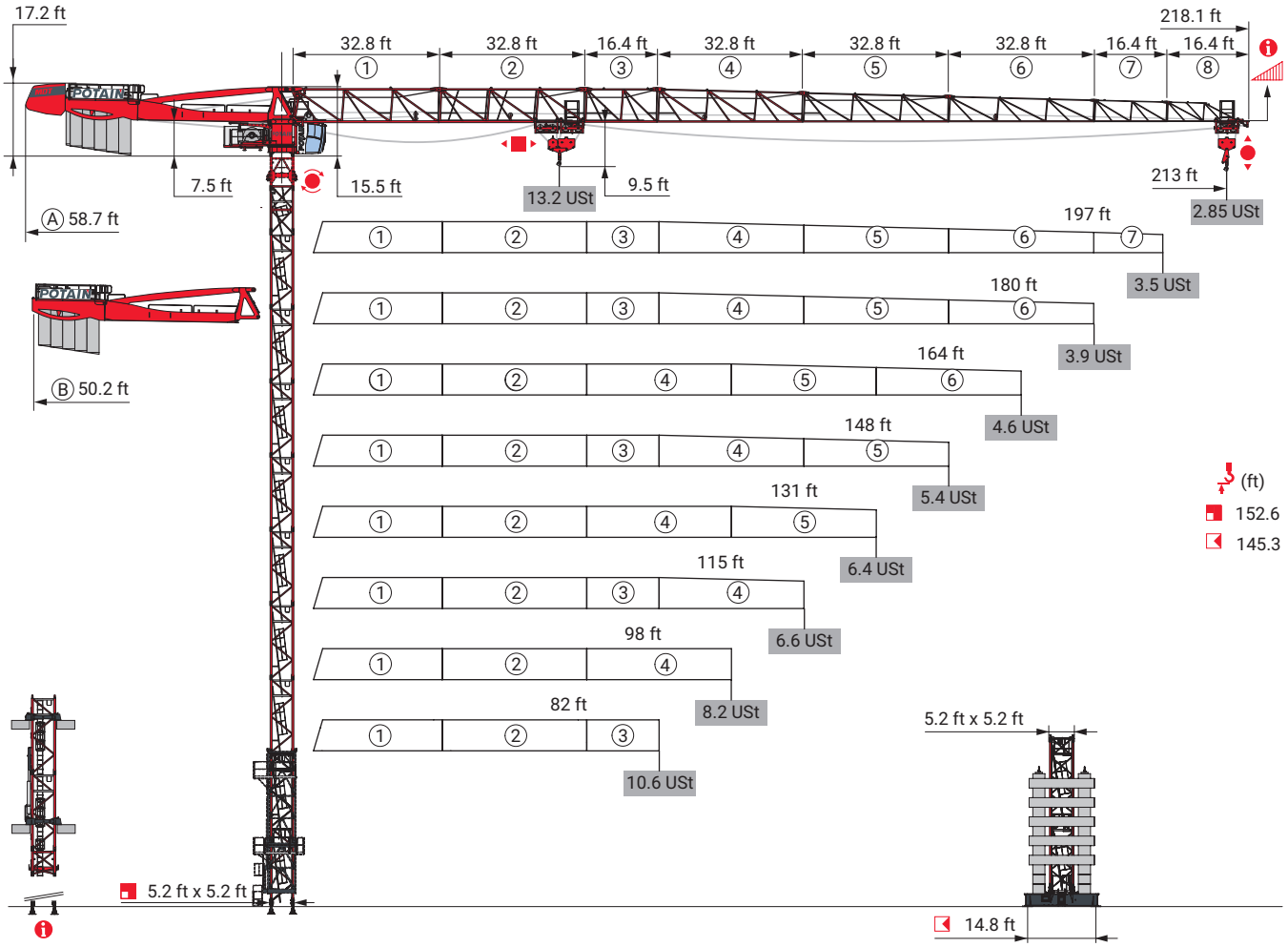
POTAIN®

MDT 249 J12

ASME B30.3-2025



Potain Plus

Power Control

Top Site

Anti-collision systems

Automatic Rotation Control

Values have been rounded.

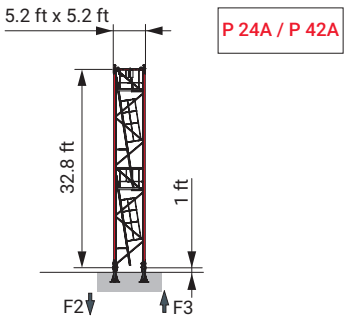
Mast - Reactions

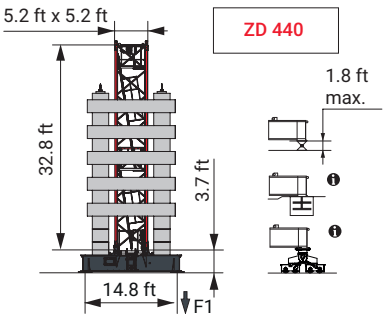
5.2 ft City - P 42A										
(ft)		82	98	115	131	148	164	180	197	213
(ft)		147	147	147	147	152.6	152.6	152.6	141.7	141.7
/P+ (ft)		147	147	147	147	152.6	152.6	152.6	141.7	141.7
	10.9 ft	0	0	0	0	2	2	2	1	1
	16.4 ft	7	7	7	7	6	6	6	6	6
	32.8 ft	1	1	1	1	1	1	1	1	1
F2 (USt)	●	164	160	166	168	180	177	181	170	173
	■	121	121	128	124	151	150	162	128	138
F3 (USt)	●	123	118	122	124	134	131	134	123	126
	■	87	86	92	86	111	111	122	87	97

5.2 ft - P 42A										
(ft)		82	98	115	131	148	164	180	197	213
(ft)		142.7	142.7	148.3	142.7	148.3	148.3	148.3	142.7	142.7
/P+ (ft)		142.7	142.7	148.3	142.7	148.3	148.3	148.3	142.7	142.7
	6.6 ft	1	1	1	1	1	1	1	1	1
	10.9 ft	2	2	1	2	1	1	1	2	2
	16.4 ft	5	5	6	5	6	6	6	5	5
	32.8 ft	1	1	1	1	1	1	1	1	1
F2 (USt)	●	161	159	169	166	176	173	177	175	176
	■	123	123	142	126	148	147	159	141	151
F3 (USt)	●	121	124	126	122	130	127	130	127	129
	■	89	88	105	88	108	108	119	100	110

5.2 ft City - ZD 440 -										
(ft)		82	98	115	131	148	164	180	197	213
(ft)		144.4	144.4	144.4	144.4	144.4	144.4	144.4	133.2	133.2
/P+ (ft)		144.4	144.4	144.4	144.4	144.4	144.4	144.4	133.2	133.2
	10.9 ft	1	1	1	1	1	1	1	0	0
	16.4 ft	6	6	6	6	6	6	6	6	6
	32.8 ft	1	1	1	1	1	1	1	1	1
F1 (USt)	●	101	100	104	105	107	106	108	103	104
	■	86	87	91	90	94	93	98	85	89

5.2 ft - ZD 440 -										
(ft)		82	98	115	131	148	164	180	197	213
(ft)		145.3	139.8	139.8	139.8	139.8	139.8	139.8	134.5	134.5
/P+ (ft)		145.3	139.8	139.8	139.8	139.8	139.8	139.8	134.5	134.5
	6.6 ft	1	1	1	1	1	1	1	1	1
	10.9 ft	2	0	0	0	0	0	0	1	1
	16.4 ft	5	6	6	6	6	6	6	5	5
	32.8 ft	1	1	1	1	1	1	1	1	1
F1 (USt)	●	104	99	102	104	105	103	105	106	105
	■	92	86	88	89	91	91	95	91	93





Other mast compositions - Please consult us.

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

Anchorages

Base ballast

(USt) / 5.2 ft City - ZD 440 -

(ft)	82	98	115	131	148	164	180	197	213
144.4	132.3	132.3	137.8	137.8	137.8	137.8	137.8		
133.2	121.3	121.3	121.3	121.3	121.3	121.3	121.3	132.3	132.3
116.8	99.2	99.2	99.2	99.2	99.2	99.2	99.2	110.2	110.2
100.4	77.2	77.2	88.2	88.2	77.2	77.2	77.2	88.2	88.2
84	66.1	66.1	66.1	66.1	66.1	66.1	55.1	66.1	77.2
67.6	66.1	66.1	55.1	66.1	55.1	66.1	55.1	66.1	77.2

(USt) / 5.2 ft - ZD 440 -

(ft)	82	98	115	131	148	164	180	197	213
145.3	137.8								
139.8	132.3	132.3	132.3	137.8	132.3	132.3	132.3		
134.5	121.3	121.3	132.3	132.3	132.3	132.3	132.3	137.8	132.3
118.1	99.2	99.2	99.2	110.2	99.2	110.2	99.2	110.2	110.2
101.7	88.2	88.2	88.2	88.2	88.2	88.2	77.2	88.2	88.2
85.3	77.2	66.1	66.1	66.1	66.1	66.1	55.1	66.1	77.2
68.9	66.1	66.1	55.1	55.1	55.1	66.1	55.1	66.1	77.2

Load curves

(ft)			49	56	66	72	82	89	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	ft
	13.2 USt	6.6 USt																						
213	10 → 53	94 - 102	13.2	12.4	10.2	9.1	7.8	7.1	6.6	6.4	5.7	5.4	4.9	4.6	4.3	4	3.7	3.6	3.3	3.2	3	2.85	2.7	USt
	10 → 54	97 - 105	13.2	12.7	10.6	9.4	8.1	7.4	6.6	6.6	6	5.6	5.1	4.9	4.5	4.3	4	3.8	3.5	3.4	3.2	3	2.85	USt P+
197	10 → 56	101 - 108	13.2	13.2	11.1	9.9	8.5	7.8	6.8	6.6	6.2	5.8	5.3	5	4.6	4.4	4.1	3.9	3.6	3.5	3.3	USt		
	10 → 58	105 - 113	13.2	13.2	11.5	10.3	8.9	8.1	7.2	6.6	6.5	6.1	5.6	5.3	4.9	4.7	4.3	4.1	3.9	3.7	3.5	USt P+		
180	10 → 56	101 - 109	13.2	13.2	11.1	9.9	8.5	7.8	6.9	6.6	6.2	5.8	5.3	5	4.6	4.4	4.1	3.9	3.6	USt				
	10 → 58	106 - 115	13.2	13.2	11.6	10.4	9	8.2	7.2	6.7	6.6	6.2	5.6	5.3	4.9	4.7	4.4	4.2	3.9	USt P+				
164	10 → 59	106 - 113	13.2	13.2	11.7	10.4	9	8.2	7.2	6.7	6.5	6.1	5.6	5.3	4.9	4.6	4.3	USt						
	10 → 61	111 - 120	13.2	13.2	12.2	11	9.5	8.7	7.7	7.1	6.6	6.5	6	5.6	5.2	5	4.6	USt P+						
148	10 → 61	109 - 118	13.2	13.2	12.1	10.8	9.3	8.5	7.5	6.9	6.6	6.4	5.8	5.5	5.1	USt								
	10 → 64	116 - 125	13.2	13.2	12.8	11.4	9.9	9.1	8	7.4	6.7	6.6	6.2	5.9	5.4	USt P+								
131	10 → 62	111 - 120	13.2	13.2	12.4	11.1	9.6	8.7	7.7	7.1	6.6	6.5	6	USt										
	10 → 65	118 - 128	13.2	13.2	13.1	11.8	10.2	9.3	8.2	7.6	6.9	6.6	6.4	USt P+										
115	10 → 60	107 - 115	13.2	13.2	11.8	10.6	9.1	8.3	7.3	6.8	6.6	USt												
	10 → 63	114 - 115	13.2	13.2	12.6	11.3	9.7	8.9	7.9	7.3	6.6	USt P+												
98	10 → 61		13.2	13.2	12.2	10.9	9.4	8.6	7.5	USt														
	10 → 64		13.2	13.2	13	11.6	10.1	9.2	8.1	USt P+														
82	10 → 63		13.2	13.2	12.6	11.3	9.7	USt																
	10 → 67		13.2	13.2	13.2	12.2	10.5	USt P+																

= - 0.63 USt max.

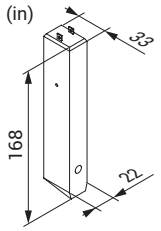
(ft)			49	56	66	72	82	89	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	ft
	13.2 USt	6.6 USt																						
213	8 → 53	95 - 97	13.2	12.5	10.3	9.2	7.9	7.2	6.5	6	5.4	5	4.5	4.3	3.9	3.7	3.4	3.2	2.95	2.8	2.6	2.5	2.3	USt
	8 → 54	98 - 100	13.2	12.8	10.6	9.5	8.2	7.5	6.6	6.3	5.6	5.3	4.8	4.5	4.1	3.9	3.6	3.4	3.2	3	2.8	2.7	2.5	USt P+
197	8 → 57	102 - 104	13.2	13.2	11.1	10	8.6	7.8	6.9	6.5	5.9	5.5	5	4.7	4.3	4.1	3.7	3.5	3.3	3.1	2.9	USt		
	8 → 58	106 - 108	13.2	13.2	11.6	10.4	9	8.2	7.2	6.7	6.2	5.8	5.3	5	4.6	4.3	4	3.8	3.5	3.4	3.2	USt P+		
180	8 → 57	102 - 104	13.2	13.2	11.2	10	8.6	7.9	6.9	6.6	5.9	5.5	5	4.7	4.3	4.1	3.8	3.6	3.3	USt				
	8 → 59	107 - 109	13.2	13.2	11.7	10.5	9	8.3	7.3	6.8	6.2	5.8	5.3	5	4.6	4.4	4	3.8	3.6	USt P+				
164	8 → 59	106 - 109	13.2	13.2	11.7	10.5	9	8.3	7.3	6.7	6.2	5.8	5.3	5	4.5	4.3	4	USt						
	8 → 61	112 - 115	13.2	13.2	12.3	11	9.5	8.7	7.7	7.2	6.6	6.2	5.6	5.3	4.9	4.6	4.3	USt P+						
148	8 → 61	110 - 112	13.2	13.2	12.2	10.9	9.4	8.6	7.6	7	6.4	6	5.5	5.2	4.7	USt								
	8 → 64	117 - 119	13.2	13.2	12.8	11.5	10	9.1	8.1	7.5	6.7	6.5	5.9	5.6	5.1	USt P+								
131	8 → 62	112 - 115	13.2	13.2	12.5	11.2	9.6	8.8	7.8	7.2	6.6	6.2	5.6	USt										
	8 → 65	119 - 122	13.2	13.2	13.2	11.8	10.2	9.4	8.3	7.7	6.9	6.6	6.1	USt P+										
115	8 → 60	108 - 110	13.2	13.2	11.9	10.6	9.2	8.4	7.4	6.8	6.3	USt												
	8 → 63		13.2	13.2	12.6	11.3	9.8	9	7.9	7.4	6.6	USt P+												
98	8 → 61		13.2	13.2	12.2	11	9.4	8.6	7.6	USt														
	8 → 65		13.2	13.2	13	11.7	10.1	9.3	8.2	USt P+														
82	8 → 63		13.2	13.2	12.7	11.4	9.8	USt																
	8 → 67		13.2	13.2	13.2	12.2	10.6	USt P+																

= - 0.18 USt max.

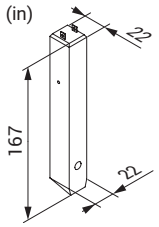
Jib weight and counter-jib ballast

	(lb) (+/- 5%)								
				10,141 lb	3,373 lb	(lb)	6,768 lb	3,373 lb	(lb)
213 ft	27,761	26,985	27,961	5	1	54,079	7	2	54,123
197 ft	27,090	26,381	27,247	5	1	54,079	7	2	54,123
180 ft	26,420	25,710	26,577	5	0	50,706	7	1	50,750
164 ft	24,562	23,852	24,718	4	2	47,311	6	2	47,355
148 ft	24,877	24,167	25,033	4	2	47,311	6	2	47,355
131 ft	23,089	22,379	23,246	4	1	43,938	6	1	43,982
115 ft	22,824	22,115	22,981	4	0	40,565	5	2	40,587
98 ft	20,723	20,014	20,880	3	2	37,170	5	1	37,214
82 ft	19,557	18,847	19,714	3	1	33,797	4	2	33,819

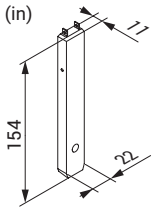
CBS - 10,141 lb



CBU - 6,768 lb



CBY - 3,373 lb

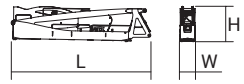
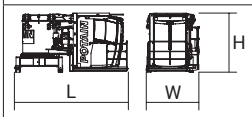
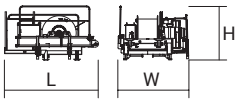
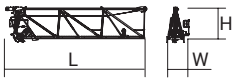
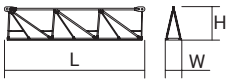
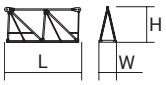
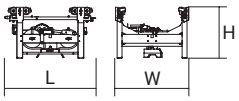
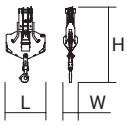
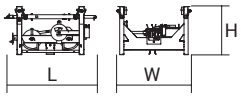
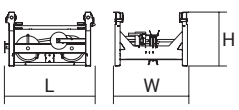
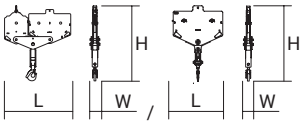


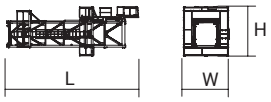
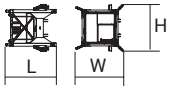
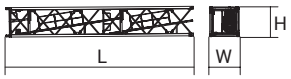
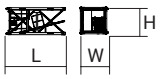
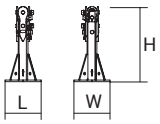
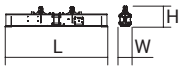
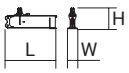
Dimensions and weight

Slewing crane part - : 213 ft - - 50 LVF

x 6

x 5

Slewing crane part			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
	Counter-jib	Ⓐ Ⓑ	36.1 36.1	3.8 3.8	8.1 8.1	19,213 18,629
	Towerhead + cab	5.2 ft	15.6	7.5	8.4	17,372
	Hoisting winch (+ rope)	50 LVF 90 HPL™	10.6 10.6	8.1 10.8	6.2 5.8	6,945 9,235
	Jib section	① 6 DVF	35.5	5.6	9	7,959
	Jib section	② ④ ⑤ ⑥	33.8 33.5 33.6 33.4	3.9 3.9 3.9 3.9	7.9 7.8 6.9 6	5,335 3,439 2,723 1,753
	Jib section	③ ⑦	17.3 16.7	3.9 3.9	7.8 5	2,116 683
	Jib section	⑧	16.7	3.9	4.6	485
	Trolley	13.2 USt	6.1	5	3.4	882
	Pulley block	13.2 USt	3.9	1.4	7.6	1,003
	Trolley	13.2 USt	5.2	5	3.2	463
	Trolley	13.2 USt 6.6 USt	5.6 6.1	5 5	3 3.2	540 520
	Pulley block	13.2 USt 6.6 USt	5.4 3.6	0.7 0.9	5.8 5.3	992 584

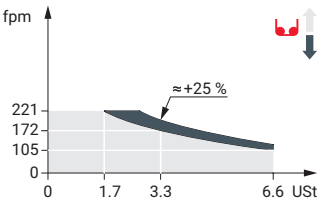
Crane tower			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
	T 41	⍁ 5.2 ft	35.6	12.3	13.5	15,653
	K40/K40-2	⍁ 5.2 ft	7.3	6.9	6.8	2,932
	K 447E KM 447E KRM 449E	⍁ 5.2 ft	33.5 33.5 33.5	5.3 5.3 5.3	5.3 5.3 5.3	7,474 7,088 9,370
	K 447A KMT 447A K 449A KMT 449A	⍁ 5.2 ft	17.1 17.1 17.1 17.1	5.5 5.5 5.5 5.5	5.3 5.3 5.3 5.3	4,079 3,847 4,916 4,696
	KMT 447C	⍁ 5.2 ft	11.6	5.5	5.3	2,976
	Fixing angles	P 24A / P 42A	1.8	1.8	3.8	529
	Cross girder	ZD 440	22.2	2.8	4.3	6,702
	1/2 Cross girder	ZD 440	10.8	1.9	4.4	2,778

Mechanisms

480 V - 60 Hz											hp	kW	
	50 LVF 30 Optima	fpm	105	131	172	221	54	69	90	110	50	37	1,106 ft
		USt	6.6	5	3.3	1.7	13.2	9.9	6.6	3.5			
	90 HPL™ 30	fpm	176	228	326	469	723	90	120	172	244	361	90	66	2,434 ft
		USt	6.6	5	3.3	1.7	0.2	13.2	9.9	6.6	3.3	0.9			
	6 DVF 4 Optima	fpm	0 → 164 (13.2 USt) 0 → 328 (6.6 USt) 0 → 394 (3.3 USt)										5.5	4	
	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	50 LVF: 58 → 38 kVA 90 HPL™: 90 → 54 kVA	

50 LVF 30 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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