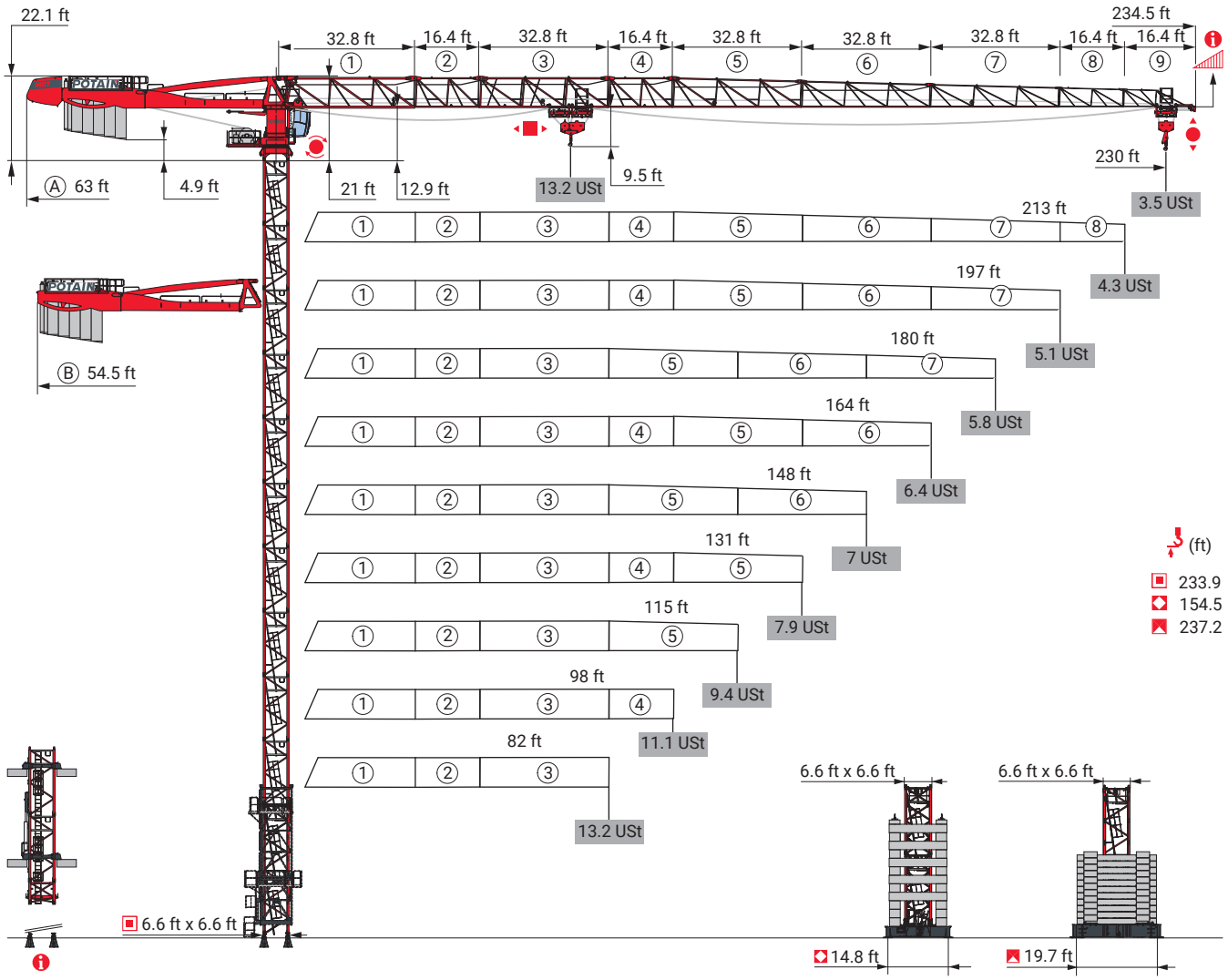
POTAIN®

MDT 319

ASME B30.3-2025



Potain Plus

Power Control

Top Site

Anti-collision systems

Automatic Rotation Control

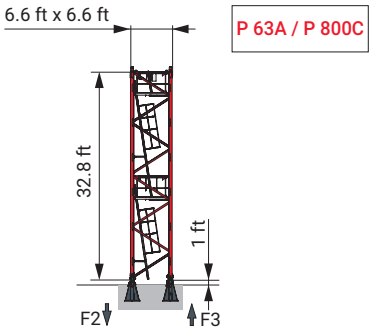
Values have been rounded.

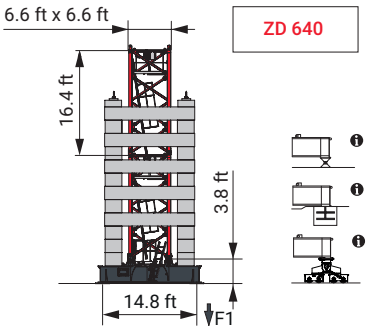
Mast - Reactions

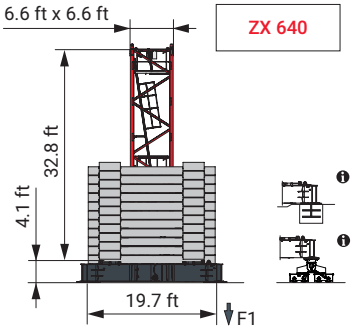
6.6 ft - P 63A										
(ft)	82	98	115	131	148	164	180	197	213	230
(ft)	233.9	233.9	233.9	233.9	233.9	228.7	228.7	228.7	228.7	228.7
/P+ (ft)	233.9	233.9	233.9	233.9	233.9	228.7	228.7	228.7	228.7	228.7
10.9 ft	0	0	0	0	0	1	1	1	1	1
16.4 ft	12	12	12	12	12	11	11	11	11	11
32.8 ft	1	1	1	1	1	1	1	1	1	1
F2 (USt) ●	251	261	261	269	272	266	266	271	280	281
F2 (USt) ■	385	395	396	404	403	393	393	394	402	410
F3 (USt) ●	195	203	202	208	210	204	204	207	216	216
F3 (USt) ■	337	344	344	350	349	337	337	337	344	351

6.6 ft - ZD 640 -										
(ft)	82	98	115	131	148	164	180	197	213	230
(ft)	143.7	149.3	149.3	154.5	154.5	154.5	154.5	154.5	149.3	149.3
/P+ (ft)	143.7	149.3	149.3	154.5	149.3	154.5	154.5	154.5	143.7	149.3
10.9 ft	2	1	1	0	0	0	0	0	1	1
16.4 ft	7	8	8	9	9	9	9	9	8	8
F1 (USt) ●	112	119	120	125	124	125	125	127	127	128
F1 (USt) ■	98	107	107	115	114	118	118	118	116	119

6.6 ft - ZX 640 -										
(ft)	82	98	115	131	148	164	180	197	213	230
(ft)	237.2	237.2	237.2	237.2	231.6	231.6	231.6	231.6	231.6	231.6
/P+ (ft)	237.2	237.2	237.2	237.2	231.6	231.6	231.6	231.6	231.6	226.1
10.9 ft	0	0	0	0	1	1	1	1	1	1
16.4 ft	12	12	12	12	11	11	11	11	11	11
32.8 ft	1	1	1	1	1	1	1	1	1	1
F1 (USt) ●	159	164	164	170	162	164	164	166	172	172
F1 (USt) ■	232	238	238	243	228	235	235	236	240	245







Other mast compositions - Please consult us.

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

Anchorages

Base ballast

(USt) / 6.6 ft - ZD 640 -

(ft)	82	98	115	131	148	164	180	197	213	230
154.5				137.8	137.8	137.8	137.8	137.8		
149.3		137.8	137.8	132.3	132.3	132.3	132.3	132.3	137.8	137.8
143.7	132.3	132.3	132.3	121.3	132.3	121.3	121.3	121.3	132.3	132.3
127.3	110.2	110.2	110.2	110.2	110.2	99.2	99.2	99.2	110.2	99.2
110.9	99.2	110.2	99.2	110.2	99.2	99.2	99.2	99.2	88.2	99.2
94.5	88.2	110.2	99.2	110.2	99.2	99.2	99.2	99.2	88.2	88.2
78.1	88.2	110.2	99.2	110.2	99.2	99.2	99.2	99.2	88.2	88.2
61.7	88.2	110.2	99.2	110.2	99.2	99.2	99.2	99.2	88.2	88.2

(USt) / 6.6 ft - ZX 640 -

(ft)	82	98	115	131	148	164	180	197	213	230
237.2	231.5	231.5	231.5	242.5						
231.6	220.5	220.5	220.5	220.5	220.5	220.5	220.5	220.5	231.5	231.5
215.2	176.4	176.4	165.4	176.4	176.4	176.4	176.4	187.4	187.4	187.4
198.8	143.3	143.3	143.3	154.3	154.3	154.3	154.3	154.3	165.4	165.4
182.4	121.3	121.3	121.3	121.3	132.3	121.3	121.3	132.3	143.3	143.3
166	99.2	99.2	99.2	99.2	110.2	99.2	99.2	99.2	110.2	110.2
149.6	77.2	77.2	77.2	77.2	88.2	77.2	77.2	77.2	88.2	88.2
133.2	66.1	66.1	66.1	66.1	66.1	55.1	55.1	55.1	66.1	66.1
116.8	44.1	55.1	55.1	55.1	44.1	44.1	44.1	44.1	44.1	44.1
100.4	44.1	55.1	55.1	55.1	44.1	44.1	44.1	44.1	44.1	44.1
84	44.1	55.1	55.1	55.1	44.1	44.1	44.1	44.1	33.1	44.1
67.6	44.1	55.1	55.1	55.1	44.1	44.1	44.1	44.1	33.1	44.1

Load curves

(ft)			72	82	89	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	220	230	ft
	13.2 USt	6.6 USt																					
230	10 → 74	136 - 148	13.2	11.8	10.9	9.7	9	8.1	7.6	6.9	6.6	6.6	6.4	5.8	5.5	5	4.7	4.3	4.1	3.8	3.6	3.3	USt
	10 → 75	137 - 148	13.2	11.9	10.9	9.7	9	8.1	7.6	6.9	6.6	6.6	6.4	5.9	5.7	5.3	5	4.6	4.3	4	3.8	3.5	USt P+
213	10 → 78	144 - 155	13.2	12.5	11.5	10.2	9.5	8.6	8.1	7.4	7	6.6	6.6	6.1	5.7	5.2	4.9	4.5	4.3	4	USt		
	10 → 78	144 - 155	13.2	12.5	11.5	10.2	9.5	8.6	8.1	7.4	7	6.6	6.6	6.2	6	5.5	5.2	4.8	4.6	4.3	USt P+		
197	10 → 82	152 - 164	13.2	13.2	12.2	10.9	10.1	9.2	8.6	7.9	7.4	6.9	6.6	6.5	6.1	5.6	5.3	4.9	USt				
	10 → 82	153 - 164	13.2	13.2	12.2	10.9	10.1	9.2	8.6	7.9	7.4	6.9	6.6	6.6	6.3	5.9	5.5	5.1	USt P+				
180	10 → 80	148 - 159	13.2	12.9	11.9	10.6	9.8	8.9	8.3	7.6	7.2	6.7	6.6	6.4	6.1	5.8	USt						
	10 → 80	148 - 159	13.2	12.9	11.9	10.6	9.8	8.9	8.3	7.6	7.2	6.7	6.6	6.4	6.1	5.8	USt P+						
164	10 → 81	149 - 161	13.2	13	11.9	10.6	9.9	8.9	8.4	7.7	7.3	6.7	6.6	6.4	USt								
	10 → 81	149 - 161	13.2	13	11.9	10.6	9.9	8.9	8.4	7.7	7.3	6.7	6.6	6.4	USt P+								
148	10 → 84		13.2	13.2	12.4	11	10.3	9.3	8.7	8	7.6	7	USt										
	10 → 84		13.2	13.2	12.4	11	10.3	9.3	8.7	8	7.6	7	USt P+										
131	10 → 84		13.2	13.2	12.4	11	10.2	9.2	8.6	7.9	USt												
	10 → 84		13.2	13.2	12.4	11	10.2	9.2	8.6	7.9	USt P+												
115	10 → 84		13.2	13.2	12.5	11.1	10.3	9.3	USt														
	10 → 84		13.2	13.2	12.5	11.1	10.3	9.3	USt P+														
98	10 → 84		13.2	13.2	12.5	11.1	USt																
	10 → 84		13.2	13.2	12.5	11.1	USt P+																
82	10 → 82		13.2	13.2	USt																		
	10 → 82		13.2	13.2	USt P+																		

= - 0.72 USt max.

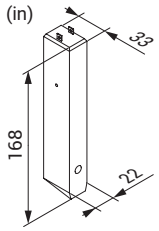
(ft)			72	82	89	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	220	230	ft
	13.2 USt	6.6 USt																					
230	8 → 74	137 - 139	13.2	11.9	11	9.7	9.1	8.2	7.7	7	6.6	6.2	5.9	5.4	5	4.5	4.2	3.8	3.6	3.3	3.1	2.9	USt
	8 → 75	138 - 140	13.2	11.9	11	9.7	9	8.2	7.7	7	6.6	6.2	5.9	5.5	5.2	4.8	4.5	4.2	3.9	3.6	3.4	3.1	USt P+
213	8 → 78	145 - 148	13.2	12.6	11.6	10.3	9.6	8.7	8.1	7.4	7	6.6	6.3	5.7	5.3	4.8	4.5	4.1	3.9	3.6	USt		
	8 → 78	145 - 148	13.2	12.6	11.6	10.3	9.6	8.6	8.1	7.4	7	6.6	6.3	5.8	5.6	5.1	4.8	4.4	4.2	3.9	USt P+		
197	8 → 83	153 - 157	13.2	13.2	12.3	10.9	10.2	9.2	8.7	7.9	7.5	6.9	6.6	6.2	5.8	5.2	4.9	4.5	USt				
	8 → 83	154 - 157	13.2	13.2	12.3	11	10.2	9.2	8.7	7.9	7.5	6.9	6.6	6.3	6	5.5	5.2	4.8	USt P+				
180	8 → 81	150 - 152	13.2	13	11.9	10.6	9.9	8.9	8.4	7.7	7.3	6.7	6.5	6.1	5.8	5.4	USt						
	8 → 81	150 - 152	13.2	13	11.9	10.6	9.9	8.9	8.4	7.7	7.3	6.7	6.5	6.1	5.8	5.4	USt P+						
164	8 → 81	151 - 154	13.2	13.1	12	10.7	10	9	8.5	7.7	7.3	6.8	6.6	6.1	USt								
	8 → 81	151 - 154	13.2	13.1	12	10.7	10	9	8.5	7.7	7.3	6.8	6.6	6.1	USt P+								
148	8 → 84		13.2	13.2	12.5	11.1	10.3	9.4	8.8	8.1	7.6	7	USt										
	8 → 84		13.2	13.2	12.5	11.1	10.3	9.4	8.8	8.1	7.6	7	USt P+										
131	8 → 84		13.2	13.2	12.5	11.1	10.3	9.3	8.7	7.9	USt												
	8 → 84		13.2	13.2	12.5	11.1	10.3	9.3	8.7	7.9	USt P+												
115	8 → 85		13.2	13.2	12.5	11.1	10.4	9.4	USt														
	8 → 85		13.2	13.2	12.5	11.1	10.4	9.4	USt P+														
98	8 → 85		13.2	13.2	12.6	11.1	USt																
	8 → 85		13.2	13.2	12.6	11.1	USt P+																
82	8 → 82		13.2	13.2	USt																		
	8 → 82		13.2	13.2	USt P+																		

= - 0.21 USt max.

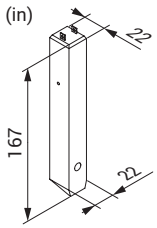
Jib weight and counter-jib ballast

	(lb) (+/- 5%)								
				10,141 lb	3,373 lb	(lb)	6,768 lb	3,373 lb	(lb)
230 ft	32,587	31,744	32,721	5	2	57,452	8	1	57,519
213 ft	31,916	31,140	32,117	5	2	57,452	8	1	57,519
197 ft	31,070	30,360	31,226	5	2	57,452	8	1	57,519
180 ft	29,211	28,501	29,368	5	0	50,706	7	1	50,750
164 ft	29,527	28,817	29,683	5	0	50,706	7	1	50,750
148 ft	27,902	27,192	28,058	4	2	47,311	7	0	47,377
131 ft	27,324	26,614	27,481	4	1	43,938	6	1	43,982
115 ft	25,536	24,826	25,693	4	0	40,565	6	0	40,609
98 ft	24,209	23,499	24,365	3	2	37,170	5	1	37,214
82 ft	22,192	21,482	22,348	3	1	33,797	5	0	33,841

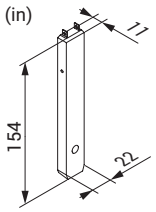
CBS - 10,141 lb



CBU - 6,768 lb



CBY - 3,373 lb

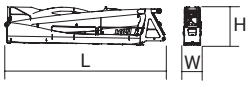
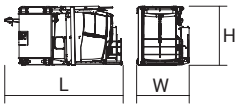
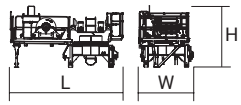
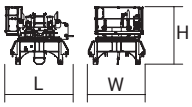
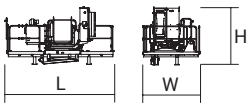
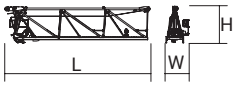
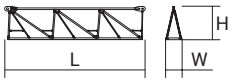
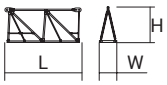
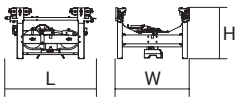
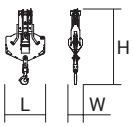
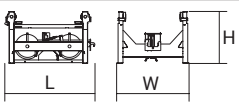
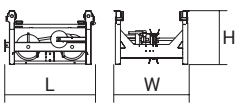
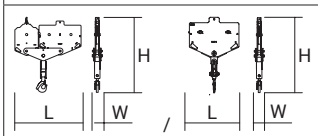


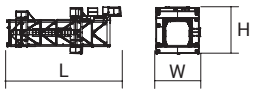
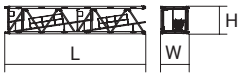
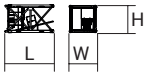
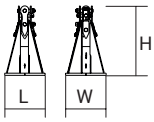
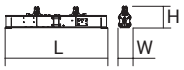
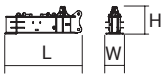
Dimensions and weight

Slewing crane part - : 230 ft - - 50 LVF

x 6

x 6

Slewing crane part			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
	Counter-jib	Ⓐ Ⓑ	36.1 36.1	3.7 3.7	8.1 8.1	21,826 20,503
	Cab mast + cab	Ultra View	16.1	7.3	8.2	13,228
	Towerhead + Hoisting winch (+ rope)	6.6 ft 50 LVF	17.3	8.3	9.2	21,054
	Towerhead	6.6 ft	9.7	8.1	8.2	13,228
	Hoisting winch (+ rope)	90 HPL™	14	7.5	7.6	9,921
	Jib section	① 6 DVF	35.8	5.6	9	9,348
	Jib section	③ ⑤ ⑥ ⑦	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	② ④ ⑧ ⑨	17.6 17.3 16.7 16.7	3.9 3.9 3.9 3.9	8 7.8 5 4.6	3,164 2,116 683 485
	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	3.4 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

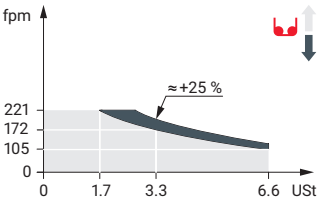
Crane tower			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
	T 61	⍁ 6.6 ft	35.5	13.6	14.7	21,385
	K 649B KM 649E KRM 6410B	⍁ 6.6 ft	33.6 33.8 33.6	6.8 6.7 6.9	6.7 6.7 6.8	11,663 10,692 15,653
	KR 649A KRMT 649A K 649A KMT 649A	⍁ 6.6 ft	17.2 17.2 17.2 17.2	6.9 6.9 6.8 6.8	6.8 6.8 6.7 6.7	7,165 6,724 6,184 5,666
	KRMT 649C	⍁ 6.6 ft	11.7	6.9	6.8	5,401
	Fixing angles	P 63A / P 800C	2.5	2.5	4.2	1,025
	Cross girder	ZD 640	22.2	1	4.7	7,055
	1/2 Cross girder	ZD 640	10.8	1.9	4.7	2,976
	Cross girder	ZX 640	30	3.9	5.1	15,168
	1/2 Cross girder	ZX 640	14.3	3.3	5.1	7,319

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	2,772 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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