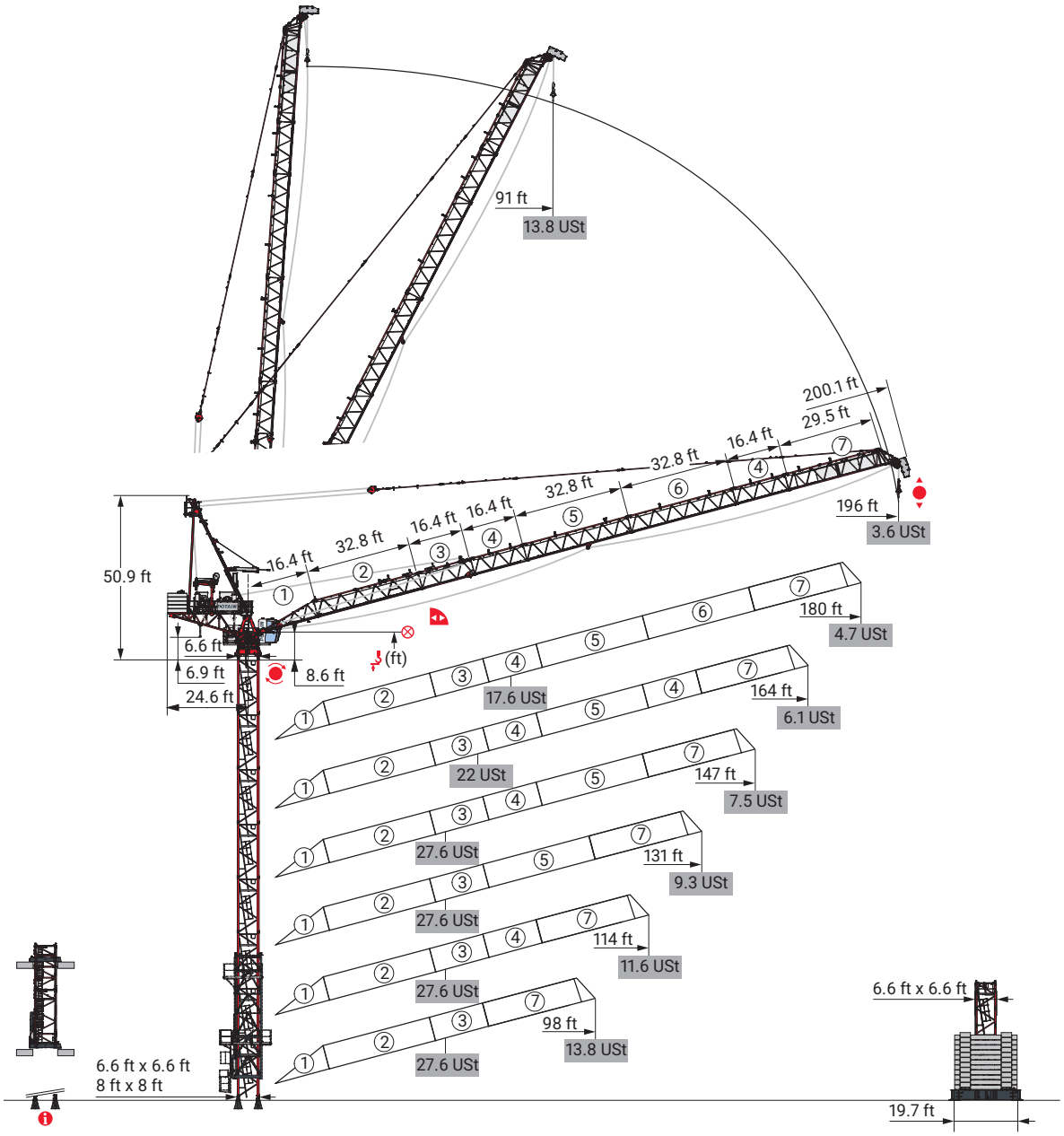
POTAIN®

MR 309 H25

ASME B30.3-2025



Auto-levelling

Potain Plus

Power Control

Anti-collision systems

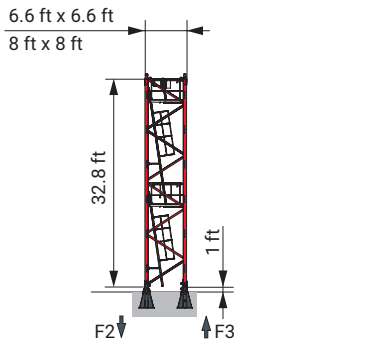
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Mast - Reactions

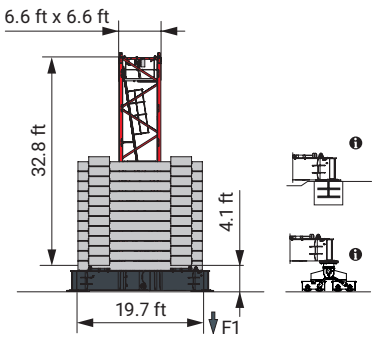
6.6 ft - P 63A							
(ft)	98	114	131	147	164	180	196
(ft)	168	157.2	151.6	146.3	140.8	135.2	129.9
/P+ (ft)	168	157.2	151.6	146.3	140.8	135.2	129.9
10.9 ft	1	0	1	2	0	1	2
16.4 ft	7	7	6	5	6	5	4
32.8 ft	1	1	1	1	1	1	1
F2 (USt) ●	254	245	243	249	243	236	237
F2 (USt) ■	260	243	246	250	253	257	260
F3 (USt) ●	193	185	183	176	173	177	177
F3 (USt) ■	200	185	188	192	194	199	202

6.6 ft - ZX 640 -							
(ft)	98	114	131	147	164	180	196
(ft)	171.3	160.4	154.9	149.3	144	138.5	132.9
/P+ (ft)	171.3	160.4	154.9	149.3	144	138.5	132.9
10.9 ft	1	0	1	2	0	1	2
16.4 ft	7	7	6	5	6	5	4
32.8 ft	1	1	1	1	1	1	1
F1 (USt) ●	149	147	149	151	148	144	145
F1 (USt) ■	152	147	148	149	150	151	155

P 63A / P 800C



ZX 640



Other mast compositions - Please consult us.

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

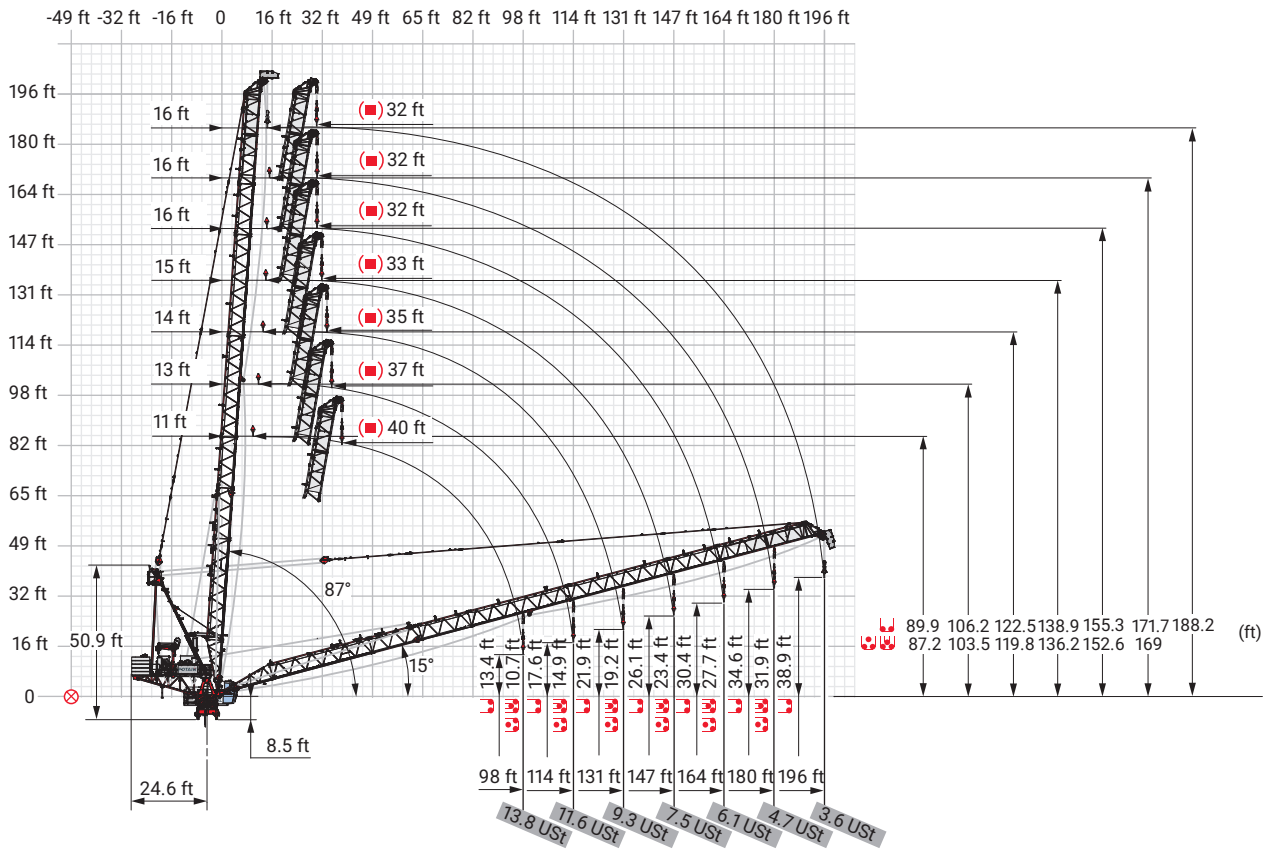
8 ft - P 800C							
(ft)	98	114	131	147	164	180	196
(ft)	163.7	152.9	147.3	141.7	136.5	130.9	125.3
/P+ (ft)	163.7	152.9	147.3	141.7	136.5	130.9	125.3
10.9 ft	0	2	0	1	2	0	1
16.4 ft	7	6	7	6	4	4	4
6.6 ft	1	1	1	1	1	1	1
16.4 ft	2	1	1	1	2	3	2
F2 (USt) ●	208	202	200	205	200	194	194
F2 (USt) ■	205	193	194	197	201	204	205
F3 (USt) ●	146	140	127	132	129	133	134
F3 (USt) ■	145	133	135	138	141	145	147

Anchorages

Base ballast

(USt) / 6.6 ft - ZX 640 -							
(ft)	98	114	131	147	164	180	196
171.3	176.4						
160.4	165.4	176.4					
154.9	154.3	165.4	176.4				
149.3	154.3	165.4	165.4	176.4			
144	143.3	154.3	165.4	165.4	176.4		
138.5	132.3	154.3	154.3	165.4	165.4	176.4	
132.9	132.3	143.3	154.3	154.3	165.4	176.4	187.4
116.5	110.2	121.3	132.3	132.3	143.3	154.3	165.4
100.1	99.2	110.2	110.2	121.3	121.3	132.3	143.3
83.7	77.2	88.2	99.2	99.2	110.2	121.3	132.3

Luffing jib


-49 ft -32 ft -16 ft 0 16 ft 32 ft 49 ft 65 ft 82 ft 98 ft 114 ft 131 ft 147 ft 164 ft 180 ft 196 ft
196 ft
180 ft
164 ft
147 ft
131 ft
114 ft
98 ft
82 ft
65 ft
49 ft
32 ft
16 ft
0
16 ft
16 ft
16 ft
15 ft
14 ft
13 ft
11 ft
32 ft
32 ft
32 ft
33 ft
35 ft
37 ft
40 ft
87°
15°
50.9 ft
8.5 ft
24.6 ft
13.4 ft 10.7 ft 17.6 ft 14.9 ft 21.9 ft 19.2 ft 26.1 ft 23.4 ft 30.4 ft 27.7 ft 34.6 ft 31.9 ft 38.9 ft
98 ft 114 ft 131 ft 147 ft 164 ft 180 ft 196 ft
13.8 USt 11.6 USt 9.3 USt 7.5 USt 6.1 USt 4.7 USt 3.6 USt
89.9 106.2 122.5 138.9 155.3 171.7 188.2
87.2 103.5 119.8 136.2 152.6 169
(ft)

Load curves

(ft)			49	55	65	72	82	88	98	101	104	114	117	121	131	133	137	147	149	154	164	165	170	180	ft
		13.8 USt																							
180	16 → 72	87 - 89	17.6	17.6	17.6	17.6	15	13.8	12.1	-	11.1	9.6	-	8.8	7.7	-	7.1	6.2	-	5.7	4.9	-	4.5	3.9	USt
	16 → 72	87 - 89	17.6	17.6	17.6	17.6	15	13.8	12.2	-	11.1	9.8	-	9	7.9	-	7.3	6.4	-	5.9	5.2	-	4.8	4.2	USt P+
164	16 → 62	90 - 92	22	22	20.8	18.5	15.7	14.2	12.7	-	11.6	10.1	-	9.3	8.1	-	7.5	6.6	-	6	5.3	5.2	USt		
	16 → 62	90 - 92	22	22	20.8	18.5	15.7	14.2	12.7	-	11.6	10.2	-	9.4	8.3	-	7.7	6.8	-	6.3	5.5	5.5	USt P+		
147	15 → 52	91 - 94	27.6	25.8	21.3	19	16.1	14.5	13	-	11.9	10.4	-	9.5	8.4	-	7.7	6.8	6.6	USt					
	15 → 52	91 - 94	27.6	25.8	21.3	19	16.1	14.5	13	-	11.9	10.5	-	9.6	8.5	-	7.9	7	6.8	USt P+					
131	14 → 52	92 - 95	27.6	25.8	21.4	19.1	16.2	14.7	13.2	-	12.1	10.6	-	9.8	8.6	8.4	USt								
	14 → 52	92 - 95	27.6	25.8	21.4	19.1	16.2	14.7	13.2	-	12.1	10.7	-	9.9	8.8	8.5	USt P+								
114	13 → 52	95 - 97	27.6	25.9	21.6	19.4	16.6	15.1	13.7	-	12.5	11.1	10.7	USt											
	13 → 52	95 - 97	27.6	25.9	21.6	19.4	16.6	15.1	13.7	-	12.5	11.1	10.8	USt P+											
98	11 → 52	97 - 100	27.6	25.9	21.9	19.7	17	15.5	13.8	13.5	USt														
	11 → 52	97 - 100	27.6	25.9	21.9	19.7	17	15.5	13.8	13.5	USt P+														

= - 0.65 USt max.

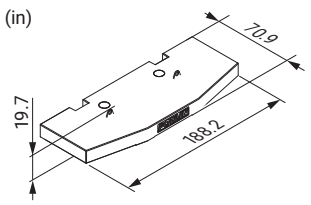
(ft)		49	55	65	72	82	88	98	101	104	114	117	121	131	133	137	147	149	154	164	165	170	180	196	ft
	13.8 USt																								
196	16 → 91	13.8	13.8	13.8	13.8	13.8	13.8	12.5	-	11.4	10	-	9.2	8	-	7.4	6.5	-	6	5.2	-	4.8	4.2	3.3	USt
	16 → 91	13.8	13.8	13.8	13.8	13.8	13.8	12.5	-	11.5	10.1	-	9.3	8.2	-	7.6	6.7	-	6.2	5.5	-	5.1	4.5	3.6	USt P+
180	16 → 88	13.8	13.8	13.8	13.8	13.8	13.8	12.1	-	11.1	9.8	-	9	8	-	7.4	6.6	-	6.1	5.4	-	5	4.4	USt	
	16 → 88	13.8	13.8	13.8	13.8	13.8	13.8	12.1	-	11.2	9.9	-	9.2	8.2	-	7.6	6.8	-	6.4	5.7	-	5.3	4.7	USt P+	
164	16 → 91	13.8	13.8	13.8	13.8	13.8	13.8	12.6	-	11.6	10.3	-	9.5	8.5	-	7.9	7	-	6.5	5.8	5.7	USt			
	16 → 91	13.8	13.8	13.8	13.8	13.8	13.8	12.6	-	11.7	10.4	-	9.6	8.7	-	8.1	7.2	-	6.7	6.1	6	USt P+			
147	15 → 93	13.8	13.8	13.8	13.8	13.8	13.8	12.9	-	11.9	10.6	-	9.8	8.8	-	8.1	7.3	7.2	USt						
	15 → 93	13.8	13.8	13.8	13.8	13.8	13.8	12.9	-	12	10.7	-	9.9	8.9	-	8.3	7.5	7.4	USt P+						
131	14 → 95	13.8	13.8	13.8	13.8	13.8	13.8	13.2	-	12.3	10.9	-	10.2	9.1	8.9	USt									
	14 → 95	13.8	13.8	13.8	13.8	13.8	13.8	13.2	-	12.3	11	-	10.3	9.3	9.1	USt P+									
114	13 → 96	13.8	13.8	13.8	13.8	13.8	13.8	13.6	-	12.7	11.5	11.2	USt												
	13 → 96	13.8	13.8	13.8	13.8	13.8	13.8	13.6	-	12.7	11.6	11.3	USt P+												
98	11 → 101	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	USt															
	11 → 101	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	USt P+															

Jib weight & counter-jib ballast

	(lb) (+/- 5%)			
		/		
			15,873 lb	(lb)
196 ft	24,251	14,771 / 9,480	5	79,366
180 ft	24,251	14,771 / 9,480	5	79,366
164 ft	22,928	14,771 / 8,157	5	79,366
147 ft	21,385	14,771 / 6,614	5	79,366
131 ft	19,180	9,700 / 9,480	5	79,366
114 ft	17,857	9,700 / 8,157	5	79,366
98 ft	16,314	9,700 / 6,614	5	79,366

CDJ - 15,873 lb

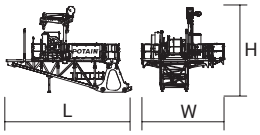
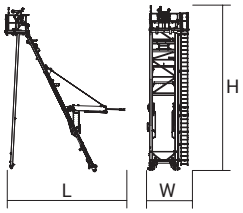
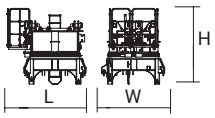
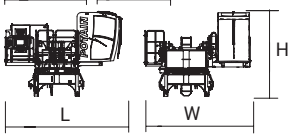
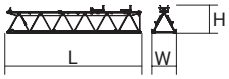
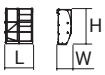
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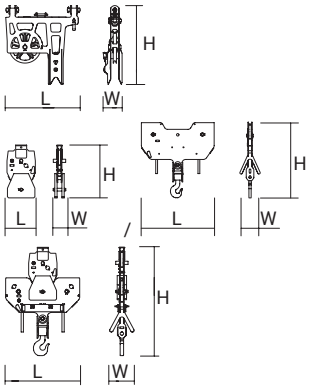
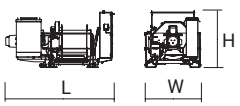
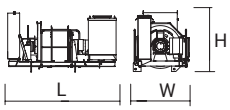
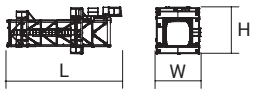
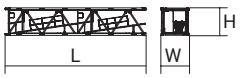
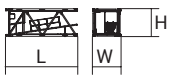
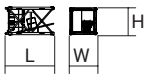
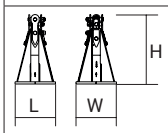
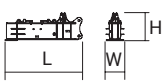


Dimensions and weight

Slewing crane part - : 196 ft - - 132 HPL™

x 7
x 6

Slewing crane part			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
	Counter-jib	100 VVF	28.3	16.5	19.3	24,482
	Strut		23.6	9	37.8	14,440
	Cab	Ultra View	17.1	6.4	8.2	4,079
	Towerhead	6.6 ft	10.2	8.1	9.7	20,944
			17.1	15.7	12.5	25,023
	Jib section	①	19.3	7.2	6.1	3,086
		② ⑤ ⑥ ⑦	33.4 33.4 33.4 31	6.2 6 6 6	6.9 6.6 6.6 6.6	3,086 2,866 2,756 3,086
		③ ④	17 17	6 6	6.9 6.6	2,116 1,521
			5.9	5.1	7.4	959
	Jib nose inspection platform		4.7	2.5	6	187

			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
	Pulley block		4.1 2.8 5.3 5.3	1 0.9 1.8 1.8	4.4 3.8 5.6 7.8	342 1,025 1,135 2,160
	Hoisting winch (+ rope)	132 HPL™ 180 HPL ™GH	11.6 15	6.1 6.3	6.2 6.5	11,100 19,103
	Luffing winch (+ rope)	100 VVF	10.6	5.5	5.9	7,948
Crane tower						
	T 61 T 851	⍁ 6.6 ft ⍁ 8 ft	35.5 36.7	13.6 15.9	14.7 19	21,385 34,723
	K80/KR60-2 Connecting mast	⍁ 8/6.6 ft	7.3	10.7	8.1	8,852
	K 649B KM 649E KRM 6410B KRM 849B	⍁ 6.6 ft ⍁ 6.6 ft ⍁ 6.6 ft ⍁ 8 ft	33.6 33.8 33.6 33.6	6.8 6.7 6.9 8.4	6.7 6.7 6.8 8.3	11,663 10,692 15,653 17,196
	K 649A KMT 649A KR 649A KRMT 649A K 849A KMT 849A KR 849A KRMT 849A	⍁ 6.6 ft ⍁ 6.6 ft ⍁ 6.6 ft ⍁ 6.6 ft ⍁ 8 ft ⍁ 8 ft ⍁ 8 ft ⍁ 8 ft	17.2 17.2 17.2 17.2 17.2 17.2 17.2 17.2	6.8 6.8 6.9 6.9 8.3 8.4 8.3 8.4	6.7 6.7 6.8 6.8 8.2 8.3 8.2 8.3	6,184 5,666 7,165 6,724 7,496 6,945 9,458 9,017
	KRMT 649C KRMT 849C	⍁ 6.6 ft ⍁ 8 ft	11.7 11.7	6.9 8.4	6.8 8.3	5,401 7,066
	Fixing angles	P 63A / P 800C	2.5	2.5	4.2	1,025
	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	
	132 HPL™ 63	fpm	133	172	243	363	502	67	87	125	185	251	132	98	2,815 ft
		USt	13.8	10.4	6.9	3.4	1.1	27.6	20.7	13.8	6.9	2.9			
	180 HPL™ 63 GH	fpm	179	220	289	438	640	90	112	149	238	320	180	132	3,937 ft
		USt	13.8	10.4	6.9	3.4	0.9	27.6	20.7	13.8	6.9	3.3			
	100 VVF 50		2 min										100	75	
	RVF 172 Optima+	rpm	0 → 0.8										2 x 10	2 x 7.5	

IEC 60204-32	kVA	
480 V (+6% -10%) 60 Hz	132 HPL™ + 100 VVF: 205 → 112 kVA 180 HPL™ + 100 VVF: 243 → 131 kVA	

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.

- Standard equipment
- Options
- Jib articulation axis
- Weathervaning position
- 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
- Luffing
- 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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Ref. 02D_ASMEB30.3_MR309H25_2023_46-4
MR 309 H25

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