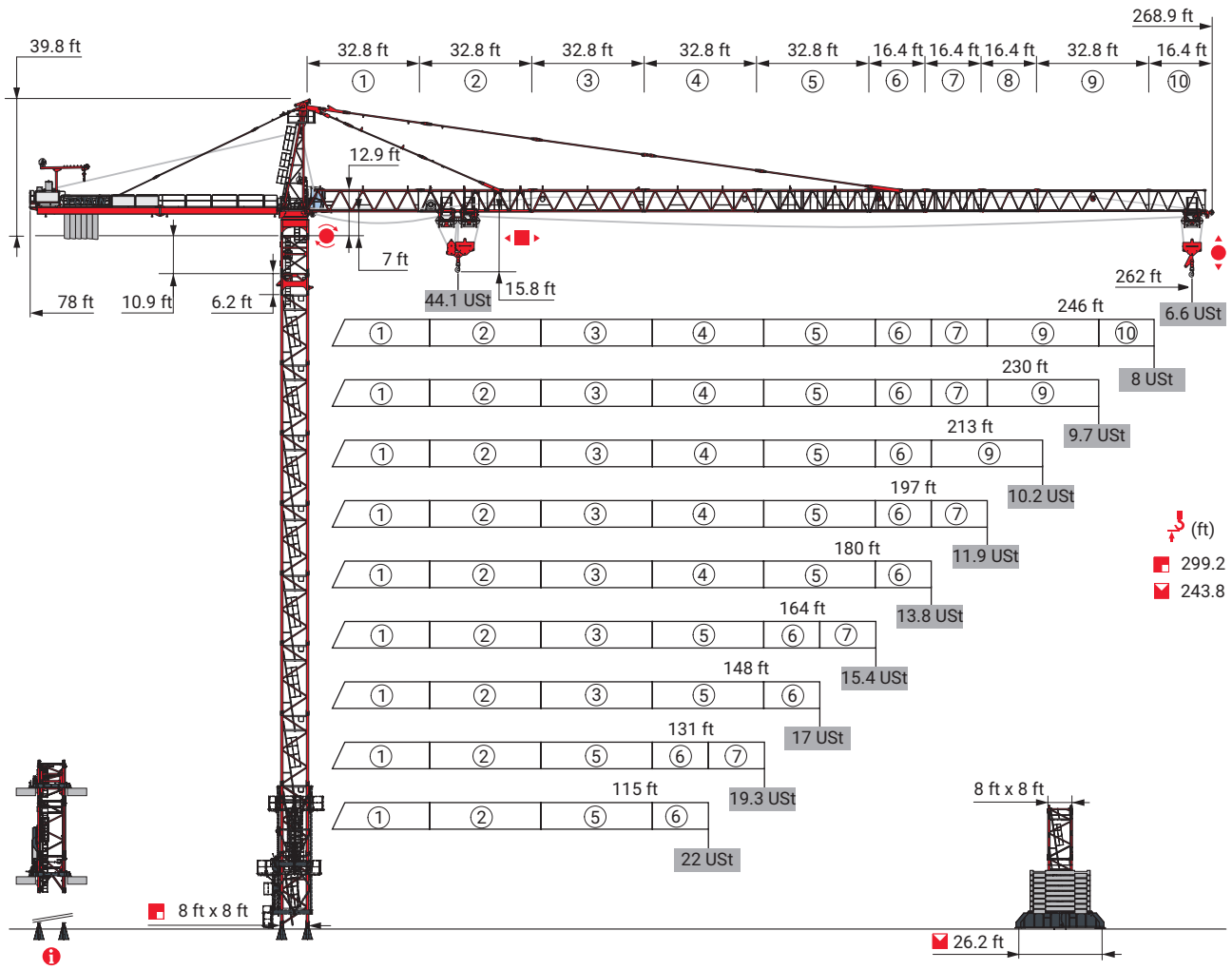
POTAIN®

MD 689 M40

ASME B30.3-2025



Potain Plus | Power Control | | Top Site | Anti-collision systems | Automatic Rotation Control

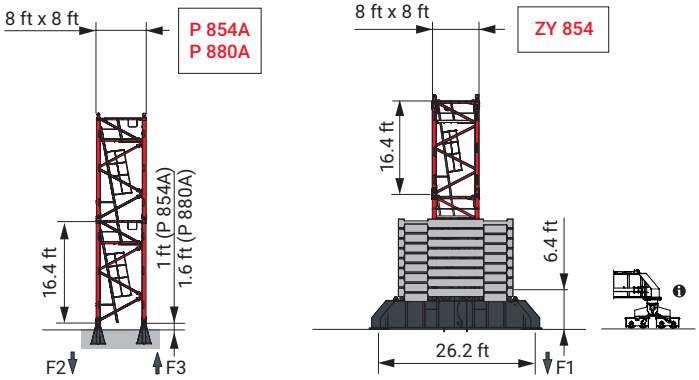
Values have been rounded.

Mast - Reactions

8 ft - P 854A											
(ft)		115	131	148	164	180	197	213	230	246	262
(ft)		244.1	244.1	244.1	238.5	238.5	238.5	238.5	232.9	238.5	244.1
/P+ (ft)		244.1	244.1	244.1	238.5	238.5	238.5	238.5	232.9	238.5	244.1
10.9 ft		1	1	1	1	1	1	1	1	1	1
6.2 ft		1	1	1	1	1	1	1	1	1	1
10.9 ft		0	0	0	1	1	1	1	2	1	0
16.4 ft		14	14	14	13	13	13	13	12	13	14
F2 (USt)	●	424	425	438	429	433	433	434	429	425	447
	■	530	528	540	512	515	523	519	500	531	591
F3 (USt)	●	311	310	321	310	310	308	308	301	294	314
	■	440	435	445	415	414	420	415	394	422	481

8 ft - P 880A											
(ft)		115	131	148	164	180	197	213	230	246	262
(ft)		299.2	299.2	293.6	293.6	293.6	293.6	293.6	293.6	293.6	288.4
/P+ (ft)		299.2	299.2	293.6	293.6	293.6	293.6	293.6	293.6	293.6	288.4
10.9 ft		1	1	1	1	1	1	1	1	1	1
6.2 ft		1	1	1	1	1	1	1	1	1	1
10.9 ft		2	2	0	0	0	0	0	0	0	1
16.4 ft		16	16	17	17	17	17	17	17	17	16
F2 (USt)	●	534	535	533	535	541	543	543	548	534	543
	■	872	873	835	834	841	852	849	856	866	876
F3 (USt)	●	404	401	400	400	401	402	399	401	386	396
	■	764	762	724	720	723	733	727	731	739	751

8 ft - ZY 854 -											
(ft)		115	131	148	164	180	197	213	230	246	262
(ft)		243.8	238.5	243.8	238.5	238.5	238.5	232.9	232.9	232.9	243.8
/P+ (ft)		243.8	238.5	243.8	238.5	238.5	238.5	232.9	232.9	232.9	243.8
10.9 ft		1	1	1	1	1	1	1	1	1	1
6.2 ft		1	1	1	1	1	1	1	1	1	1
10.9 ft		1	2	1	2	2	2	0	0	0	1
16.4 ft		13	12	13	12	12	12	13	13	13	13
F1 (USt)	●	219	215	221	220	219	220	217	215	212	234
	■	277	262	279	264	263	269	247	249	252	307



Other mast compositions - Please consult us.

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

Anchorages

Base ballast

(USt) / 8 ft - ZY 854 -

(ft)	115	131	148	164	180	197	213	230	246	262
243.8	211.6		198.4							211.6
238.5	198.4	198.4	185.2	198.4	185.2	185.2				185.2
232.9	185.2	185.2	185.2	185.2	185.2	172	185.2	172	172	172
216.5	158.7	158.7	158.7	158.7	158.7	145.5	145.5	145.5	145.5	132.3
200.1	132.3	132.3	132.3	132.3	132.3	119.1	119.1	119.1	119.1	119.1
183.7	119.1	119.1	105.8	105.8	105.8	105.8	105.8	105.8	105.8	119.1
167.3	92.6	92.6	92.6	92.6	92.6	105.8	105.8	105.8	105.8	105.8
150.9	79.4	79.4	92.6	92.6	92.6	92.6	92.6	92.6	92.6	105.8
134.5	79.4	79.4	79.4	79.4	92.6	92.6	92.6	92.6	92.6	92.6
118.1	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	92.6	92.6
101.7	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
85.3	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
68.9	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4

Load curves



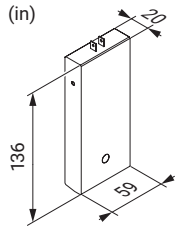
(ft)			39	49	72	82	98	115	121	131	148	154	164	180	187	197	213	220	230	236	246	253	262	ft
	44.1 USt	22 USt																						
262	12.8 → 50.8	89 - 97	44.1	44.1	28.7	24.5	21.7	18.1	16.9	15.4	13.3	12.6	11.6	10.3	9.8	9.2	8.2	7.8	7.4	7.1	6.6	6.3	6	USt
	12.8 → 52.6	93.7 - 102.4	44.1	44.1	30.3	26	22	19.3	18.1	16.5	14.4	13.7	12.7	11.3	10.8	10.1	9.1	8.7	8.2	7.8	7.3	7	6.6	USt P+
246	12.8 → 53.2	87.8 - 93.8	44.1	44.1	29.1	24.3	20.7	16.8	15.5	13.9	12.5	12	11.3	10.4	10	9.6	8.7	8.4	7.9	7.7	7.3	USt		
	12.8 → 56.6	93.5 - 100.6	44.1	44.1	32	26.7	22	18.3	16.8	15.3	13.6	13.1	12.5	11.4	11	10.5	9.6	9.2	8.7	8.4	8	USt	P+	
230	12.8 → 60	97.8 - 102	44.1	44.1	34.1	28.4	22	19.2	18.1	16.5	14.3	13.6	12.7	11.7	11.3	10.7	9.8	9.4	8.8	USt				
	12.8 → 60.3	104 - 106.5	44.1	44.1	36.3	31.3	24	19.8	18.4	16.7	15	14.5	13.9	12.8	12.4	11.8	10.7	10.3	9.7	USt	P+			
213	12.8 → 57.3	100.2 - 107.4	44.1	44.1	33.3	28.4	22.6	20.4	19	17.3	15	14.2	13.1	11.6	11.1	10.4	9.3	USt						
	12.8 → 60.4	107.8 - 112.8	44.1	44.1	36.5	31.3	24.8	21.5	20	18.3	16.4	15.6	14.4	12.8	12.2	11.4	10.2	USt	P+					
197	12.8 → 57.1	101.5 - 109	44.1	44.1	33.4	28.7	22.9	20.8	19.4	17.7	15.4	14.6	13.6	12.1	11.5	10.8	USt							
	12.8 → 59.5	109.4 - 115.1	44.1	44.1	35.8	31	25	22	20.5	18.7	16.7	16.1	14.9	13.3	12.7	11.9	USt	P+						
180	12.8 → 58.5	105.3 - 113.3	44.1	44.1	34.6	29.8	23.9	21.7	20.4	18.6	16.2	15.4	14.3	12.8	USt									
	12.8 → 60.8	112 - 119.1	44.1	44.1	36.5	31.6	25.6	22	21.6	19.8	17.4	16.5	15.4	13.8	USt	P+								
164	12.8 → 57.7	105 - 113.1	44.1	44.1	34.2	29.5	23.8	21.7	20.4	18.7	16.3	15.5	14.4	USt										
	12.8 → 60.7	111.9 - 118.9	44.1	44.1	36.4	31.5	25.6	22	21.6	19.8	17.3	16.5	15.4	USt	P+									
148	12.8 → 57	103.8 - 111.8	44.1	44.1	33.7	29.1	23.5	21.4	20.1	18.4	16.1	USt												
	12.8 → 59.8	110.2 - 117.1	44.1	44.1	35.8	31	25.1	22	21.2	19.4	17	USt	P+											
131	12.8 → 57.6	104.8 - 113	44.1	44.1	34.1	29.5	23.8	21.6	20.3	18.6	USt													
	12.8 → 59.6	109.8 - 116.6	44.1	44.1	35.6	30.8	25	22	21.1	19.3	USt	P+												
115	12.8 → 58.1	106.5 - 114.8	44.1	44.1	34.6	29.9	24.2	22	USt															
	12.8 → 59	108.5 - 114.8	44.1	44.1	35.2	30.5	24.7	22	USt	P+														

= - 2.34 USt max.

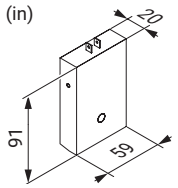
Jib weight and counter-jib ballast

	(lb) (+/- 5%)			
		13,228 lb	8,818 lb	(lb)
262 ft	63,405	6	0	79,366
246 ft	61,189	6	0	79,366
230 ft	59,976	5	1	74,957
213 ft	57,496	5	0	66,139
197 ft	56,901	4	1	61,729
180 ft	54,421	3	2	57,320
164 ft	50,794	2	2	44,092
148 ft	48,325	2	1	35,274
131 ft	44,158	1	2	30,865
115 ft	41,689	1	1	22,046

CBC - 13,228 lb



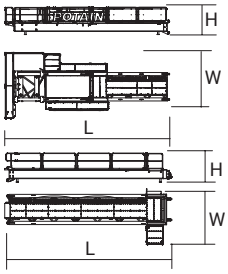
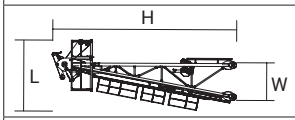
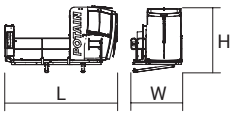
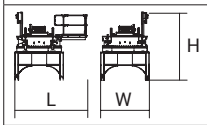
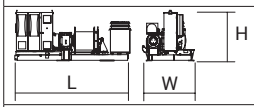
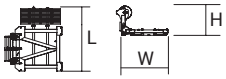
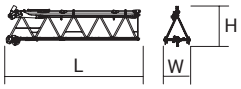
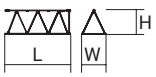
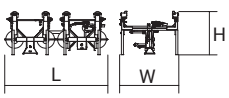
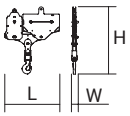
CBD - 8,818 lb

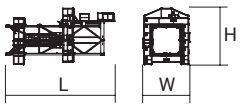
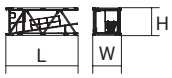
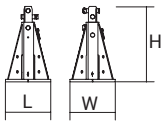
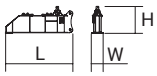
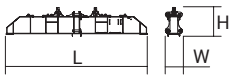


Dimensions and weight

Slewing crane part - 262 ft - - 320 LVF

x 14
x 11

Slewing crane part			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
	Counter-jib		38.4 36.2	15.4 12.3	6.4 6.8	14,551 10,858
	Cathead		11.6	6.5	32.3	18,221
	Cab	Ultra View	16.4	8.2	9.1	4,134
	Towerhead	8 ft	12.1	9.5	12.7	25,485
	Hoisting winch (+ rope)	320 LVF	16.7	7.5	7.3	21,793
	Intermediate winch frame		10.7	9.5	5.4	12,485
	Jib section	① ②15 DVF ③ ④ ⑤ ⑨	34 33.9 33.6 33.6 33.6 33.5	6.2 6.2 6.2 6.2 6.2 6.2	8.3 7.7 7.9 7.6 7.6 6.6	11,241 11,942 6,634 6,105 6,279 3,075
	Jib section	⑥ ⑦ ⑧ ⑩	17.5 17.2 17.2 17	6.2 6.2 6.2 6.2	7.4 6.7 6.7 6.5	4,222 2,476 2,211 1,215
	Trolley	44.1 USt	13	7.2	5.5	3,131
	Pulley block	44.1 USt	8.1	1.2	9.4	4,050

Crane Tower			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
	T 851	⍁ 8 ft	36.7	15.9	19	34,723
	K 85/K 85-2	⍁ 8 ft	7.3	10.7	8.2	7,937
	KM 850.10B KM 850.14B KMT 850.10A KMT 850.14A K 88/K 85A2 KM 880.10A KMT 880.10A KMT 850.10C	⍁ 8 ft	33.9 33.9 17.5 17.5 17.5 17.8 17.8 12	8.3 8.3 8.3 8.3 8.2 8.3 8.3 8.3	8.2 8.2 8.2 8.2 8.2 8.3 8.6 8.2	22,201 24,670 12,015 13,206 18,281 18,453 19,180 9,326
	Fixing angles	P 854A P 880A	3 3.3	3 3.3	4.9 6.2	2,072 3,536
	1/2 Cross girder	ZY 854	18.7	3.2	7.4	14,176
	Cross girder	ZY 854	39	4.7	7.4	30,865

Mechanisms

480 V - 60 Hz												hp	kW	
	320 LVF 100 Optima	fpm	220	282	387	486	531	112	141	197	243	266	320	240	1,745 ft
		USt	22	16.5	11	7.5	6.6	44.1	33.1	22	15.7	14			
	15 DVF 16 Optima	fpm	0 → 108 (44.1 USt)			0 → 164 (22 USt)		0 → 220 (11 USt)		0 → 328 (2.8 USt)			15	11	
	RVF 173 Optima+	rpm	0 → 0.8										3 x 10	3 x 7.5	

IEC 60204-32	kVA
480 V (+6% -10%) 60 Hz	297 → 169 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
- 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

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MD 689 M40