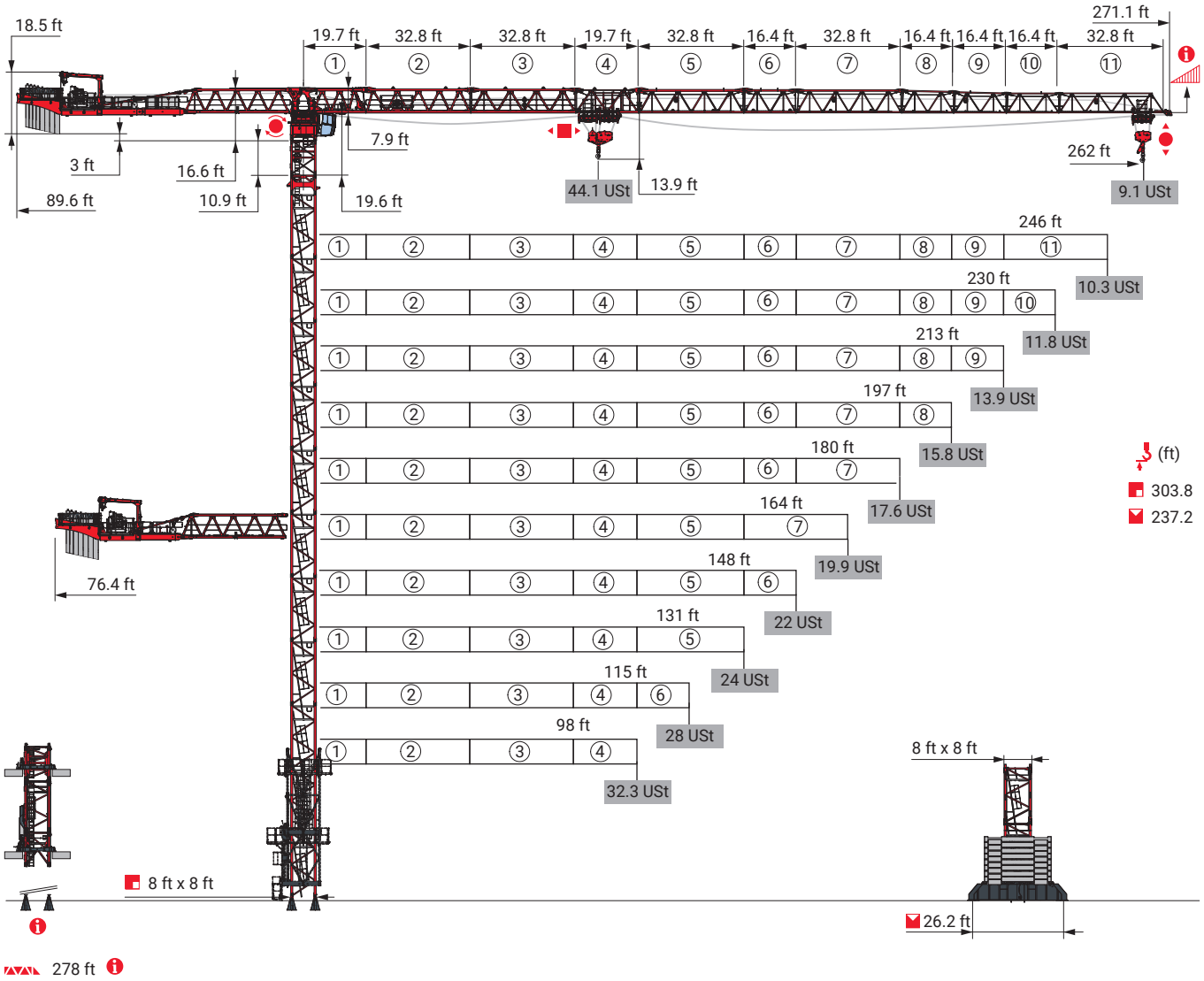
POTAIN®

MDT 809 M40

ASME B30.3-2025



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

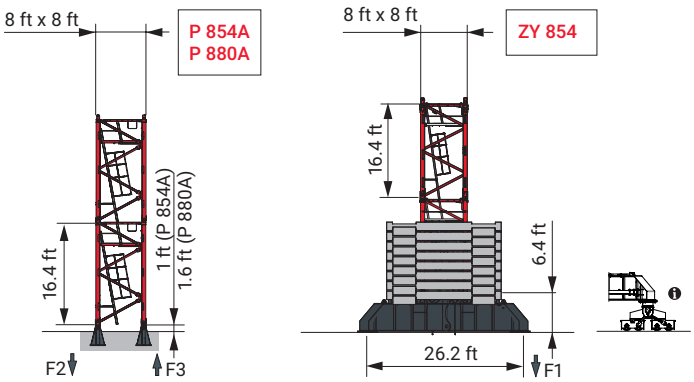
Values have been rounded.

Mast - Reactions

8 ft - P 854A												
(ft)		98	115	131	148	164	180	197	213	230	246	262
(ft)		232	226.4	232	232	232	226.4	232	232	232	232	237.5
/P+ (ft)		215.6	221.1	210	210	204.7	199.2	193.6	204.7	221.1	232	237.5
10.9 ft		1	1	1	1	1	1	1	1	1	1	1
6.2 ft		1	1	1	1	1	1	1	1	1	1	1
10.9 ft		2	0	2	2	2	0	2	2	2	2	1
16.4 ft		12	13	12	12	12	13	12	12	12	12	13
F2 (USt)	●	454	442	468	465	466	451	469	469	468	482	496
	■	436	400	441	454	452	425	467	478	493	497	533
F3 (USt)	●	321	308	326	321	320	307	321	319	317	330	341
	■	325	287	321	331	328	304	341	350	365	366	400

8 ft - P 880A												
(ft)		98	115	131	148	164	180	197	213	230	246	262
(ft)		303.8	298.2	298.2	298.2	298.2	298.2	298.2	298.2	292.7	292.7	292.7
/P+ (ft)		298.2	292.7	292.7	292.7	292.7	292.7	287.4	287.4	287.4	292.7	292.7
10.9 ft		1	1	1	1	1	1	1	1	1	1	1
6.2 ft		1	1	1	1	1	1	1	1	1	1	1
10.9 ft		1	2	2	2	2	2	2	2	0	0	0
16.4 ft		17	16	16	16	16	16	16	16	17	17	17
F2 (USt)	●	607	590	615	611	613	606	617	618	597	617	621
	■	908	847	887	894	895	886	915	920	876	901	916
F3 (USt)	●	443	426	444	437	437	433	440	440	421	437	440
	■	765	706	738	743	741	736	760	764	723	743	756

8 ft - ZY 854 -												
(ft)		98	115	131	148	164	180	197	213	230	246	262
(ft)		232	226.4	226.4	232	226.4	220.8	232	232	232	232	237.2
/P+ (ft)		215.6	220.8	210	210	204.4	204.4	193.6	204.4	215.6	232	237.2
10.9 ft		1	1	1	1	1	1	1	1	1	1	1
6.2 ft		1	1	1	1	1	1	1	1	1	1	1
10.9 ft		0	1	1	0	1	2	0	0	0	0	2
16.4 ft		13	12	12	13	12	11	13	13	13	13	12
F1 (USt)	●	224	222	225	228	223	226	237	238	241	245	255
	■	212	204	205	218	207	208	228	232	239	241	266



Other mast compositions - Please consult us.

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

Anchorages

Base ballast

(USt) / 8 ft - ZY 854 -

(ft)	98	115	131	148	164	180	197	213	230	246	262
237.2											211.6
232	172			158.7			185.2	185.2	198.4	198.4	198.4
226.4	158.7	172	158.7	145.5	145.5		185.2	185.2	198.4	198.4	198.4
220.8	158.7	158.7	145.5	132.3	132.3	172	172	185.2	185.2	185.2	198.4
204.4	132.3	132.3	119.1	119.1	119.1	172	172	172	172	172	172
188	105.8	105.8	105.8	105.8	105.8	158.7	158.7	158.7	158.7	158.7	158.7
171.6	92.6	92.6	92.6	92.6	92.6	145.5	145.5	145.5	145.5	145.5	158.7
155.2	92.6	92.6	92.6	92.6	92.6	132.3	132.3	132.3	132.3	145.5	145.5
138.8	92.6	92.6	92.6	92.6	92.6	119.1	132.3	132.3	132.3	132.3	145.5
122.4	92.6	92.6	92.6	92.6	92.6	119.1	119.1	119.1	119.1	119.1	132.3
106	92.6	92.6	92.6	92.6	92.6	105.8	105.8	105.8	119.1	119.1	132.3
89.6	92.6	92.6	92.6	92.6	92.6	105.8	105.8	105.8	105.8	105.8	132.3
73.2	92.6	92.6	92.6	92.6	92.6	105.8	105.8	105.8	105.8	105.8	132.3

Load curves

(ft)			56	66	82	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	220	230	236	246	253	262	ft
	44.1 USt	22 USt																									
262	13.8 → 61	108.8 - 117.5	44.1	40.5	31.1	24.9	23	22	21.2	19.4	18.3	16.9	16.1	14.9	14.2	13.3	12.7	11.9	11.5	10.8	10.4	9.8	9.5	9	8.7	8.3	USt
	13.8 → 65.3	116.8 - 126.2	44.1	43.9	33.8	27.2	25.1	22.5	22	21.1	19.9	18.4	17.5	16.2	15.5	14.5	13.9	13.1	12.5	11.8	11.4	10.8	10.4	9.9	9.6	9.1	USt P+
246	13.8 → 62.3	111.7 - 120.4	44.1	41.6	32	25.7	23.8	22	21.8	20	18.9	17.4	16.6	15.4	14.7	13.7	13.2	12.4	11.9	11.2	10.8	10.2	9.9	9.4	USt			
	13.8 → 66.9	120.3 - 129.7	44.1	44.1	34.9	28.1	26	23.4	22	21.7	20.6	19	18.1	16.8	16.1	15	14.4	13.5	13	12.3	11.9	11.2	10.8	10.3	USt P+			
230	13.8 → 64.6	116.1 - 124.7	44.1	43.3	33.4	26.9	24.9	22.3	22	20.8	19.7	18.2	17.3	16.1	15.4	14.4	13.8	13	12.5	11.8	11.3	10.7	USt					
	13.8 → 69.6	125.4 - 134.7	44.1	44.1	36.5	29.5	27.3	24.5	22.9	22	21.5	19.9	18.9	17.6	16.8	15.8	15.1	14.2	13.7	12.9	12.5	11.8	USt P+					
213	13.8 → 68.6	123.4 - 132.5	44.1	44.1	35.8	28.9	26.8	24.1	22.5	22	21.1	19.5	18.6	17.3	16.5	15.5	14.8	13.9	13.4	12.7	USt							
	13.8 → 74.1	133.3 - 143.5	44.1	44.1	39.2	31.7	29.4	26.4	24.7	22.5	22	21.3	20.3	18.9	18.1	17	16.3	15.3	14.7	13.9	USt P+							
197	13.8 → 69.9	126.2 - 135.6	44.1	44.1	36.7	29.7	27.5	24.7	23.1	22	21.6	20	19	17.7	16.9	15.9	15.2	14.3	USt									
	13.8 → 75.8	136.3 - 147	44.1	44.1	40.3	32.6	30.2	27.2	25.4	23.1	22	21.9	20.9	19.5	18.6	17.4	16.7	15.8	USt P+									
180	13.8 → 70.5	126.9 - 136.4	44.1	44.1	37	29.9	27.7	24.9	23.3	22	21.8	20.1	19.2	17.9	17.1	16	USt											
	13.8 → 76.4	137.1 - 148	44.1	44.1	40.6	32.9	30.5	27.4	25.6	23.3	22	22	21	19.6	18.8	17.6	USt P+											
164	13.8 → 71.5	129 - 138.6	44.1	44.1	37.7	30.5	28.2	25.4	23.7	22	22	20.5	19.5	18.2	USt													
	13.8 → 76.1	139.1 - 149.7	44.1	44.1	40.5	33	30.6	27.6	25.9	23.6	22.3	22	21.3	19.9	USt P+													
148	13.8 → 71.2	128.3 - 137.8	44.1	44.1	37.4	30.3	28.1	25.2	23.6	22	22	20.4	USt															
	13.8 → 75.1	137.2 - 147.6	44.1	44.1	39.9	32.5	30.2	27.2	25.5	23.2	22	22	USt P+															
131	13.8 → 73.8		44.1	44.1	39.1	31.7	29.4	26.4	24.7	22.5	USt																	
	13.8 → 76.1		44.1	44.1	40.7	33.2	30.9	27.9	26.2	24	USt P+																	
115	13.8 → 72.8		44.1	44.1	38.4	31.1	28.8	25.9	USt																			
	13.8 → 76.4		44.1	44.1	40.8	33.3	31	28	USt P+																			
98	13.8 → 72.2		44.1	44.1	38.2	30.9	USt																					
	13.8 → 75.1		44.1	44.1	39.9	32.3	USt P+																					

= - 2.24 USt max.

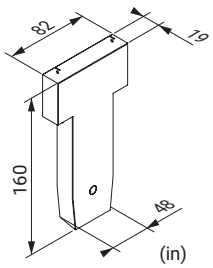
(ft)			56	66	82	98	105	115	121	131	138	148	154	164	171	180	187	197	203	213	220	230	236	246	253	262	ft
	44.1 USt	22 USt																									
262	11.2 → 60.7	107.8 - 110.1	44.1	40.2	30.9	24.7	22.8	20.9	19.5	17.7	16.6	15.2	14.3	13.2	12.5	11.6	11	10.2	9.8	9.1	8.7	8.1	7.8	7.3	7	6.6	USt
	11.2 → 65.1	115.8 - 118.2	44.1	43.7	33.6	27	24.9	22.3	21.4	19.4	18.2	16.7	15.8	14.5	13.8	12.8	12.2	11.3	10.8	10.1	9.7	9.1	8.7	8.2	7.8	7.4	USt P+
246	11.2 → 62.1	110.8 - 113.1	44.1	41.3	31.8	25.5	23.6	21.6	20.2	18.3	17.2	15.8	14.9	13.8	13.1	12.1	11.5	10.7	10.3	9.6	9.2	8.6	8.2	7.7	USt		
	11.2 → 66.8	119.3 - 121.8	44.1	44.1	34.7	27.9	25.8	23.1	22	20.1	18.9	17.4	16.4	15.2	14.4	13.4	12.8	11.9	11.4	10.7	10.2	9.6	9.2	8.7	USt P+		
230	11.2 → 64	114.2 - 116.6	44.1	42.8	33	26.5	24.5	22	21	19.1	17.9	16.4	15.5	14.3	13.6	12.6	12	11.2	10.7	10	9.6	9	USt				
	11.2 → 69	123.4 - 126	44.1	44.1	36	29	26.9	24.1	22.5	21	19.7	18.1	17.2	15.9	15.1	14	13.4	12.5	11.9	11.2	10.7	10.1	USt P+				
213	11.2 → 68.2	122.4 - 125	44.1	44.1	35.6	28.7	26.6	23.8	22.3	20.8	19.6	18	17	15.8	15	13.9	13.3	12.4	11.9	11.2	USt						
	11.2 → 73.7	132.2 - 135.2	44.1	44.1	39	31.5	29.2	26.2	24.5	22.3	21.6	19.8	18.8	17.4	16.6	15.4	14.7	13.8	13.2	12.4	USt P+						
197	11.2 → 69.7	125.2 - 128	44.1	44.1	36.5	29.5	27.3	24.5	22.9	21.4	20.1	18.5	17.5	16.2	15.4	14.4	13.7	12.8	USt								
	11.2 → 75.4	135.3 - 138.5	44.1	44.1	40	32.4	30	27	25.2	22.9	22	20.4	19.4	17.9	17.1	15.9	15.2	14.2	USt P+								
180	11.2 → 70.4	126.9 - 129.6	44.1	44.1	37	29.9	27.7	24.9	23.3	21.7	20.5	18.8	17.9	16.6	15.8	14.7	USt										
	11.2 → 76.3	137.1 - 140.7	44.1	44.1	40.6	32.9	30.5	27.4	25.6	23.3	22	20.7	19.7	18.3	17.5	16.3	USt P+										
164	11.2 → 71.5	129 - 131.7	44.1	44.1	37.7	30.5	28.2	25.4	23.7	22	20.9	19.2	18.2	16.9	USt												
	11.2 → 76.1	139.1 - 142.2	44.1	44.1	40.5	33	30.6	27.6	25.9	23.6	22.3	20.7	20	18.6	USt P+												
148	11.2 → 71.2	128.3 - 131.2	44.1	44.1	37.4	30.3	28.1	25.2	23.6	22	20.8	19.1	USt														
	11.2 → 75.1	137.2 - 147.6	44.1	44.1	39.9	32.5	30.2	27.2	25.5	23.2	22	22	USt P+														
131	11.2 → 73.9		44.1	44.1	39.1	31.7	29.4	26.4	24.7	22.5	USt																
	11.2 → 76.2		44.1	44.1	40.7	33.2	30.9	27.9	26.2	24	USt P+																
115	11.2 → 72.8		44.1	44.1	38.4	31.1	28.8	25.9	USt																		
	11.2 → 76.3		44.1	44.1	40.8	33.3	31	28	USt P+																		
98	11.2 → 72.3		44.1	44.1	38.2	30.9	USt																				
	11.2 → 75.2		44.1	44.1	39.9	32.3	USt P+																				

= - 1.86 USt max.

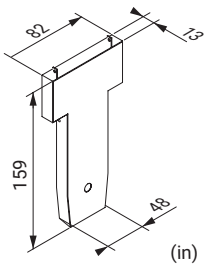
Counter-jib ballast

	180 HPL™			320 LVF			320 LVF GH		
	14,551 lb	10,362 lb	(lb)	14,551 lb	10,362 lb	(lb)	14,551 lb	10,362 lb	(lb)
262 ft	4	4	99,649	6	1	97,665	5	2	93,476
246 ft	6	1	97,665	5	2	93,476	4	3	89,287
230 ft	5	2	93,476	4	3	89,287	6	0	87,303
213 ft	4	3	89,287	4	3	89,287	5	1	83,114
197 ft	3	4	85,098	5	1	83,114	4	2	78,925
180 ft	4	2	78,925	4	2	78,925	5	0	72,753
164 ft	5	2	93,476	5	2	93,476	4	3	89,287
148 ft	4	3	89,287	6	0	87,303	5	1	83,114
131 ft	4	2	78,925	4	2	78,925	3	3	74,737
115 ft	4	1	68,564	4	1	68,564	3	2	64,375
98 ft	3	2	64,375	4	0	58,202	3	1	54,013

CCP - 14,551 lb



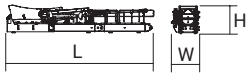
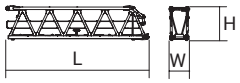
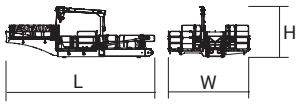
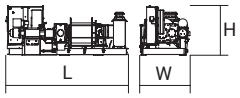
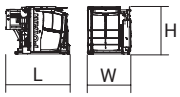
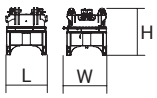
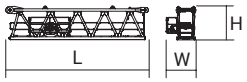
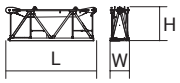
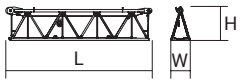
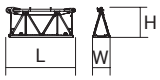
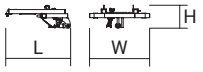
CCQ - 10,362 lb

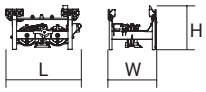
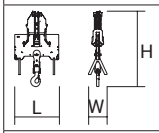
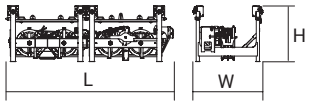
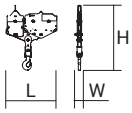
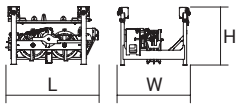
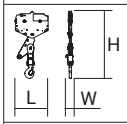
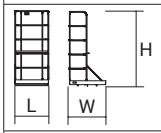
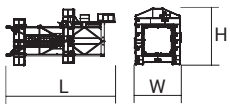
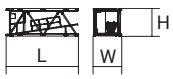
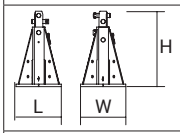
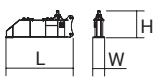


Dimensions and weight

Slewing crane part - : 262 ft - - 180 HPL™

x 11
x 10

Slewing crane part			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
			25.9	7.4	7.4	23,171
			39.4	7.4	7.4	31,978
	Counter-jib		34	4.5	8.1	21,142
			39.7	21.9	13.7	27,040
			52.8	21.9	13.7	35,891
	Hoisting winch (+ rope)	180 HPL™ 320 LVF 320 LVF GH	16.2 16.8 18.4	6.6 7.3 7.2	6.6 7.3 7.8	20,459 21,437 31,150
	Cab	Ultra View	11	7.5	8.2	6,614
	Towerhead	⍁ 8 ft	8.5	8.2	9.7	34,392
			22.5	8.2	9.7	41,006
		①	25.6	5.1	8.2	27,893
		② ③	34.5 34.1	7.3 4.8	8.2 8.1	27,133 18,683
		④	20.9	4.5	7.9	8,754
	Jib section	⑤ ⑦ ⑪	34.4 33.9 33.2	4.5 4.5 4.5	7.8 7.5 6.4	10,983 7,043 3,103
		⑥ ⑧ ⑨ ⑩	17.8 17.3 17.3 17.3	4.5 4.5 4.5 4.5	7.7 7.3 6.8 6.7	4,859 3,013 2,175 1,955
			5.5	5.2	1.9	728

			L (ft)	W (ft)	H (ft)	lb (+/- 5%)
	Trolley	44.1 USt	8.6	5.7	5.2	2,678
	Pulley block	44.1 USt	6.2	2.6	10.4	3,120
	Trolley	44.1 USt	13.8	5.9	4.9	3,219
	Pulley block	44.1 USt	7.5	1.1	9.7	2,888
	Trolley	22 USt	6.9	5.9	4.9	1,720
	Pulley block	22 USt	5	1.1	10	1,786
	Trolley inspection platform		3.1	3.4	7	125
Crane tower						
	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	
	180 HPL™100	fpm	107	131	174	274	323	53	66	89	143	161	180	132	1,745 ft
		USt	22	16.5	11	5.5	4	44.1	33.1	22	11	8.9			
	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			
	320 LVF 100 GH Optima	fpm	220	279	369	436		112	141	187	218		320	240	3,488 ft
		USt	22	16.5	11	8		44.1	33.1	22	18.1				
	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 174 Optima +	rpm	0 → 0.7										4 x 10	4 x 7.5	

IEC 60204-32	kVA
480 V (+6% -10%) 60 Hz	180 HPL™: 194 → 122 kVA 320 LVF: 306 → 178 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.

- 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
- 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 809 M40

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