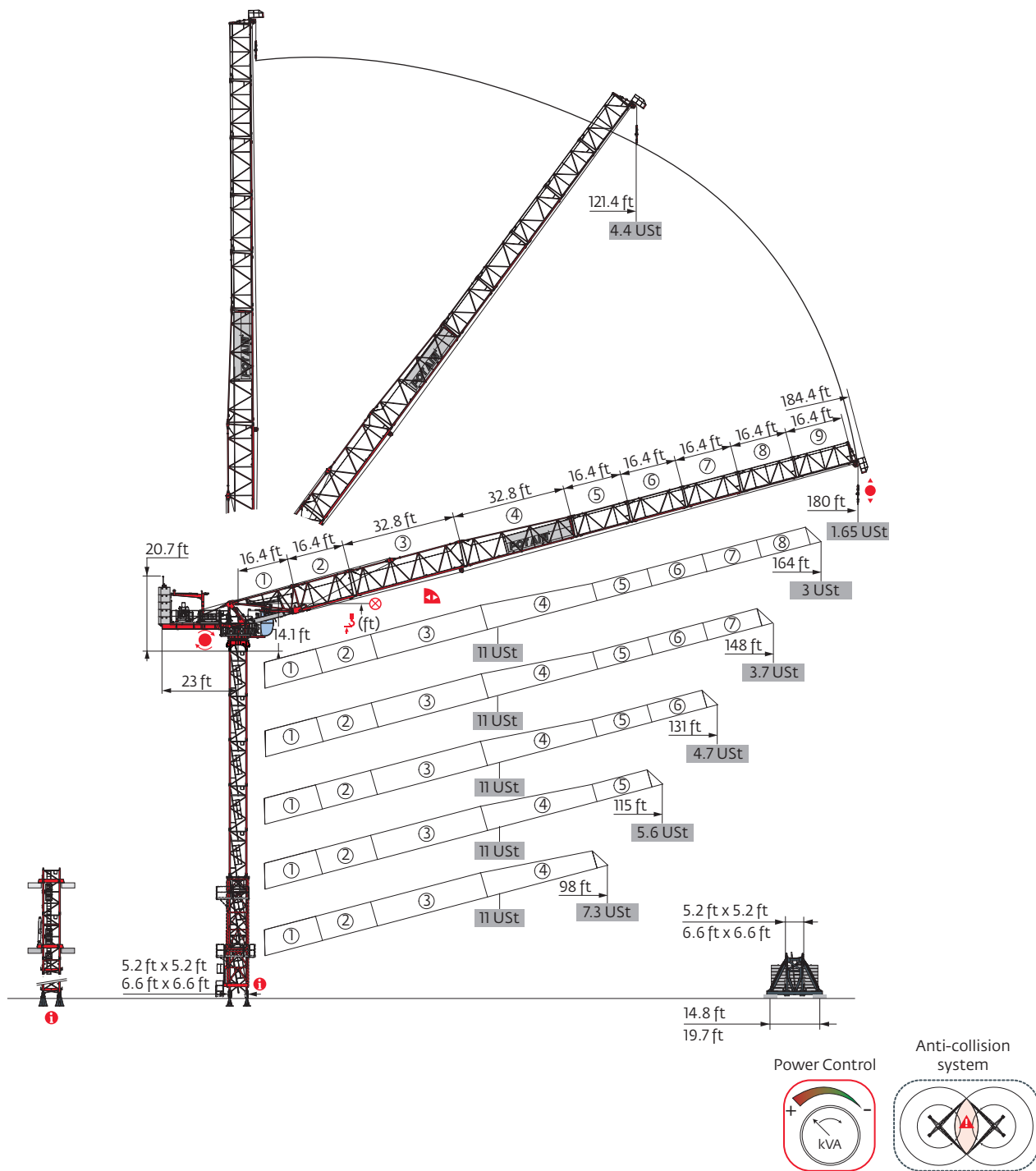


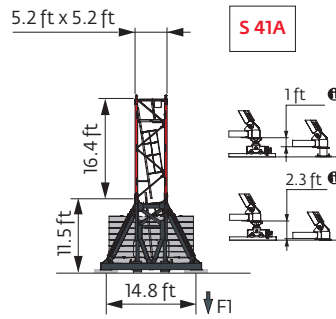
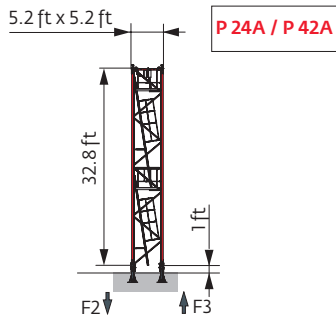
MRH 175



Mast - Reactions

| 5.2 ft - P 42A | | | | | | | |
|----------------|-------|-------|-------|-------|------|-------|--|
| Height (ft) | 98 | 115 | 131 | 148 | 164 | 180 | |
| Height (ft) | 129.6 | 129.6 | 113.2 | 113.2 | 96.8 | 102.4 | |
| 10.9 ft | 0 | 0 | 0 | 0 | 0 | 2 | |
| 16.4 ft | 5 | 5 | 4 | 4 | 3 | 2 | |
| 32.8 ft | 1 | 1 | 1 | 1 | 1 | 1 | |
| F2 (Ust) | ● 164 | 166 | 161 | 168 | 166 | 163 | |
| | ■ 169 | 187 | 170 | 188 | 168 | 198 | |
| F3 (Ust) | ● 123 | 126 | 116 | 122 | 121 | 125 | |
| | ■ 129 | 147 | 130 | 148 | 129 | 159 | |

| 5.2 ft - S 41A | | | | | | | |
|----------------|-------|-------|-------|-------|------|------|--|
| Height (ft) | 98 | 115 | 131 | 148 | 164 | 180 | |
| Height (ft) | 129.3 | 123.7 | 107.3 | 107.3 | 90.9 | 96.5 | |
| 10.9 ft | 2 | 0 | 0 | 0 | 0 | 2 | |
| 16.4 ft | 5 | 6 | 5 | 5 | 4 | 3 | |
| F1 (Ust) | ● 97 | 98 | 95 | 99 | 96 | 97 | |
| | ■ 93 | 94 | 86 | 94 | 86 | 98 | |



i Other mast compositions - Please consult us.

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

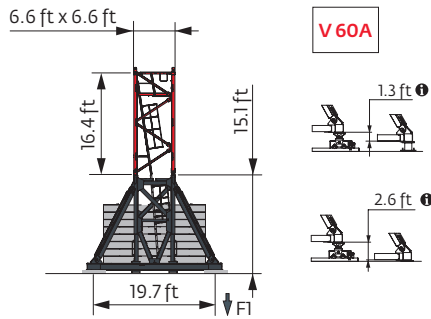
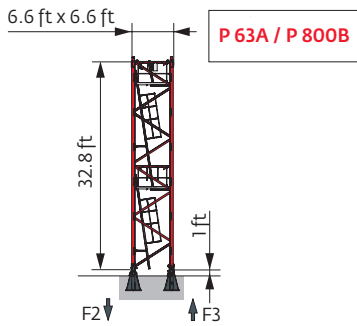
Note: When "ASCE" is noted in this data sheet it is referring to 115 mph Wind Zone, Exposure B, Design Wind Speed = 98 mph. See back cover for design wind speed calculations.

6.6 ft - P 63A

| Span (ft) | 98 | 115 | 131 | 148 | 164 | 180 |
|-------------|-------|-------|-------|-------|-------|-------|
| Height (ft) | 228 | 222.8 | 211.6 | 206.4 | 200.8 | 195.2 |
| 10.9 ft | 0 | 1 | 0 | 1 | 2 | 0 |
| 16.4 ft | 11 | 10 | 10 | 9 | 8 | 9 |
| 32.8 ft | 1 | 1 | 1 | 1 | 1 | 1 |
| F2 (Ust) | ● 197 | 198 | 197 | 200 | 203 | 191 |
| | ■ 405 | 409 | 397 | 401 | 404 | 404 |
| F3 (Ust) | ● 143 | 139 | 138 | 141 | 145 | 139 |
| | ■ 351 | 356 | 344 | 348 | 351 | 351 |

6.6 ft - V 60A




| Span (ft) | 98 | 115 | 131 | 148 | 164 | 180 |
|-------------|-------|-------|-------|-------|-------|-------|
| Height (ft) | 182.1 | 176.5 | 165.7 | 160.1 | 149.3 | 143.7 |
| 10.9 ft | 2 | 0 | 2 | 0 | 2 | 0 |
| 16.4 ft | 8 | 9 | 7 | 8 | 6 | 7 |
| F1 (Ust) | ● 105 | 107 | 106 | 107 | 107 | 101 |
| | ■ 139 | 140 | 135 | 137 | 131 | 131 |








Anchorage





Base ballast

 (USt) /  5.2 ft - S 41A - 




|  (ft) | 98 | 115 | 131 | 148 | 164 | 180 |
|--|-------|-------|-------|-------|-------|-------|
| 129.3 | 119.1 | | | | | |
| 123.7 | 112.4 | 119.1 | | | | |
| 107.3 | 105.8 | 105.8 | 112.4 | 119.1 | | |
|  (ft) | 96.5 | 99.2 | 99.2 | - | - | 125.7 |
| 90.9 | 92.6 | 99.2 | 105.8 | 105.8 | 112.4 | 119.1 |
| 74.5 | 79.4 | 86 | 92.6 | 92.6 | 99.2 | 105.8 |
| 58.1 | 72.8 | 72.8 | 79.4 | 86 | 92.6 | 99.2 |
| 41.7 | 59.5 | 66.1 | 72.8 | 72.8 | 79.4 | 86 |



 (USt) /  6.6 ft - V 60A - 

|  (ft) | 98 | 115 | 131 | 148 | 164 | 180 |
|--|-------|-------|-------|-------|-------|-------|
| 182.1 | 145.5 | | | | | |
| 176.5 | 132.3 | 145.5 | | | | |
| 165.7 | 119.1 | 132.3 | 145.5 | | | |
| 160.1 | 105.8 | 119.1 | 132.3 | 145.5 | | |
| 149.3 | 79.4 | 92.6 | 105.8 | 132.3 | 145.5 | |
|  (ft) | 143.7 | 79.4 | 79.4 | 105.8 | 119.1 | 132.3 |
| 127.3 | 66.1 | 79.4 | 79.4 | 92.6 | 105.8 | 119.1 |
| 110.9 | 66.1 | 66.1 | 66.1 | 79.4 | 79.4 | 79.4 |
| 94.5 | 52.9 | 52.9 | 66.1 | 66.1 | 66.1 | 79.4 |
| 78.1 | 39.7 | 52.9 | 52.9 | 52.9 | 66.1 | 66.1 |
| 61.7 | 39.7 | 39.7 | 39.7 | 52.9 | 52.9 | 52.9 |
| 45.3 | 26.5 | 39.7 | 39.7 | 39.7 | 39.7 | 52.9 |



Load curves



|  (ft) | 56 | 66 | 72 | 82 | 89 | 98 | 99.5 | 105 | 115 | 115.6 | 121 | 131 | 131.8 | 138 | 148 | 154 | 164 | ft | | | |
|---|-------------|---------------|----|----|----|----|------|-----|-----|-------|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|
|  11 USt | | | | | | | | | | | | | | | | | | | | | |
|  5.5 USt | | | | | | | | | | | | | | | | | | | | | |
| 164 | 15.1 → 73.6 | 114.3 - 116.8 | | 11 | 11 | 11 | 9.4 | 8.4 | 7.1 | - | 6.4 | 5.5 | - | 5.1 | 4.4 | - | 4 | 3.5 | 3.1 | 2.7 | USt |
| 148 | 14.1 → 73 | 113.5 - 115.9 | | 11 | 11 | 11 | 9.3 | 8.3 | 7 | - | 6.3 | 5.5 | - | 5.1 | 4.4 | - | 4 | 3.4 | | | USt |
| 131 | 13.5 → 73.2 | 114.1 - 116.5 | | 11 | 11 | 11 | 9.4 | 8.4 | 7.1 | - | 6.4 | 5.5 | - | 5.1 | 4.4 | 4.4 | | | | | USt |
| 115 | 12.5 → 73.6 | 115.6 - 115.6 | | 11 | 11 | 11 | 9.5 | 8.5 | 7.2 | - | 6.5 | 5.6 | 5.5 | | | | | | | USt | |
| 98 | 11.5 → 73.7 | | | 11 | 11 | 11 | 9.5 | 8.5 | 7.3 | 7.2 | | | | | | | | | | | USt |

 =  - 0.21 USt max.

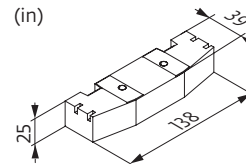


|  (ft) | 56 | 66 | 72 | 82 | 89 | 98 | 99.5 | 105 | 115 | 115.6 | 121 | 131 | 131.8 | 138 | 148 | 154 | 164 | 171 | 180 | ft | |
|---|--------------|-----|-----|-----|-----|-----|------|-----|-----|-------|-----|-----|-------|-----|-----|-----|-----|-----|------|------|-----|
|  5.5 USt | | | | | | | | | | | | | | | | | | | | | |
| 180 | 16.1 → 121.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 3.8 | - | 3.4 | 2.9 | 2.6 | 2.2 | 1.95 | 1.65 | USt |
| 164 | 15.1 → 120.1 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.4 | 4.7 | - | 4.3 | 3.7 | 3.4 | 3 | | | USt |
| 148 | 14.1 → 119.3 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.3 | 4.7 | - | 4.2 | 3.7 | | | | | USt | |
| 131 | 13.5 → 120 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.4 | 4.7 | 4.7 | | | | | | | USt | |
| 115 | 12.5 → 115.6 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.4 | | | | | | | | | USt |
| 98 | 11.5 → 99.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 | | | | | | | | | | | USt |

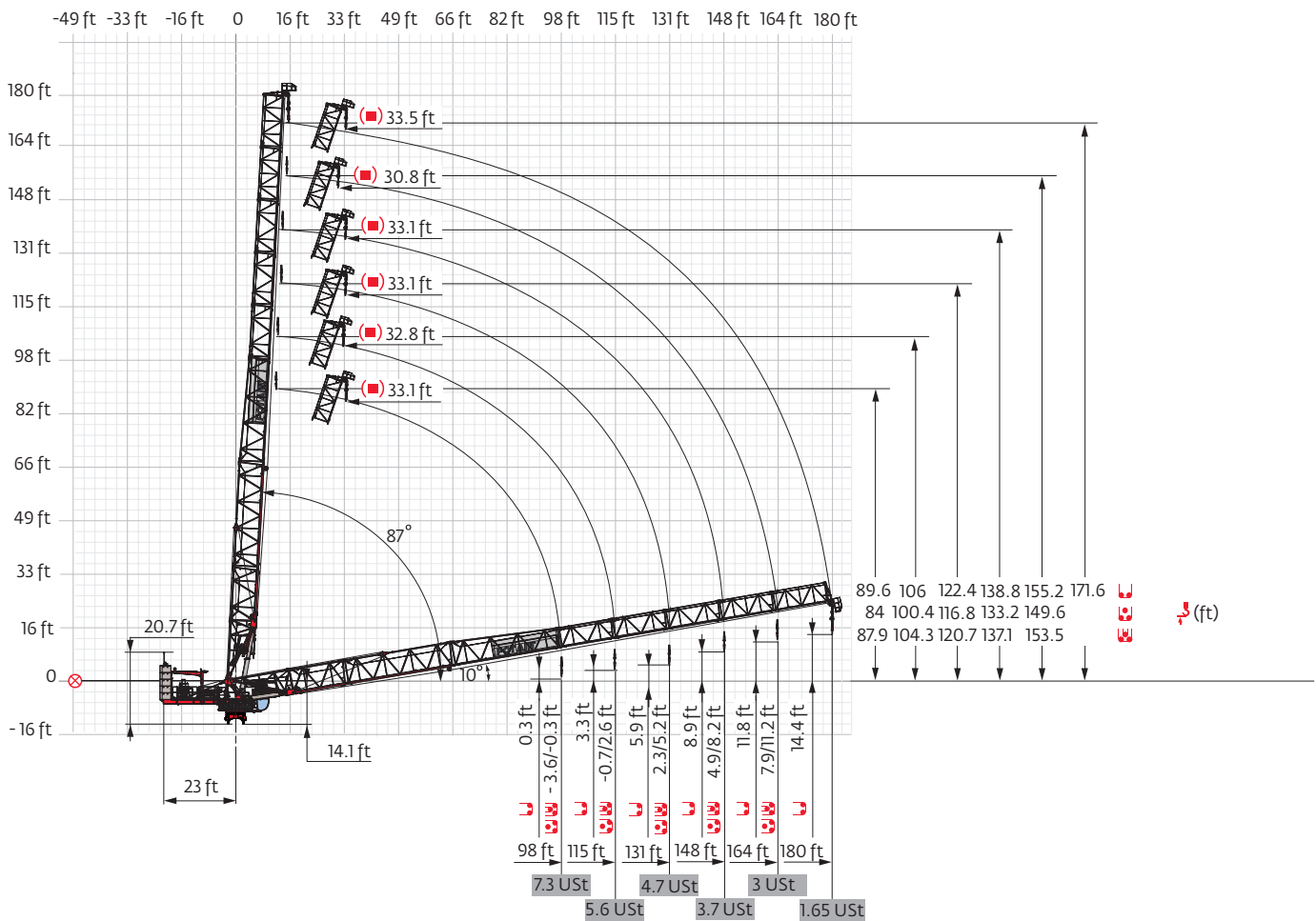
Jib weight & counter-jib ballast

| Height (ft) | Jib Weight (lb) (+/- 5%) | | Counter-jib Ballast (lb) | Total Weight (lb) |
|-------------|--------------------------|--------|--------------------------|-------------------|
| | ② | ⑨ | | |
| 180 ft | 16,403 | - | 5 | 52,360 |
| 164 ft | 15,731 | 16,128 | 5 | 52,360 |
| 148 ft | 14,948 | 15,345 | 5 | 52,360 |
| 131 ft | 14,000 | 14,397 | 5 | 52,360 |
| 115 ft | 12,821 | 13,218 | 5 | 52,360 |
| 98 ft | 11,465 | 11,862 | 5 | 52,360 |

CCL - 10,472 lb



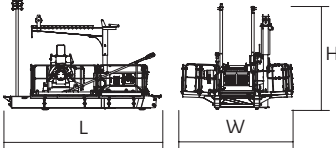
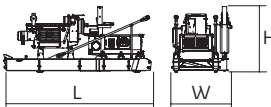
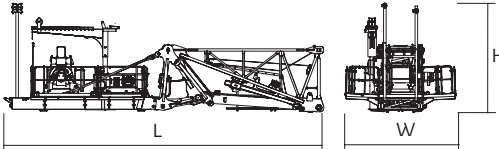
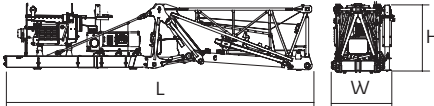

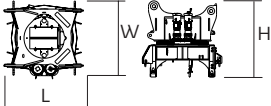
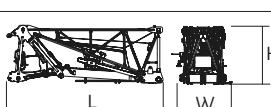
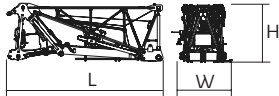
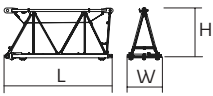
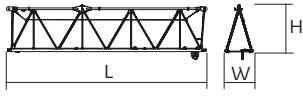
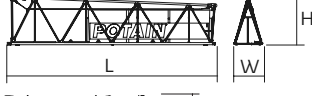

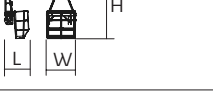

Luffing jib



Dimensions and weight

Slewing crane part:  180 ft -  50 LVF



| Slewing crane part | | L (ft) | W (ft) | H (ft) | lb (+/- 5%) | |
|------------------------|---|-------------------|--------|--------|-------------|------------------|
| Counter-jib |  | 50 LVF 90 HPL™ | 19.7 | 13.9 | 13.1 | 15,399 17,780 |
| |  | 50 LVF 90 HPL™ | 18.2 | 7.4 | 10 | 14,099 16,480 |
| Counter-jib + Jib foot |  | 50 LVF 90 HPL™ | 40 | 13.9 | 13.1 | 32,187 34,568 |
| |  | 50 LVF 90 HPL™ | 39.4 | 7.4 | 8.4 | 30,887 33,268 |
| Cab |  | V140 SR | 15.9 | 7.8 | 8.2 | 3,748 |
| Towerhead |  | □ 5.2 ft | 7.1 | 6.6 | 7.8 | 10,891 |
| |  | □ 6.6 ft | 8.2 | 8.1 | 7.8 | 13,922 |
| Jib section |  | ① | 21.6 | 7.1 | 8.4 | 16,788 |
| |  | ② | 17.4 | 5.6 | 8.2 | 3,164 |
| |  | ③ | 33 | 4.7 | 8.2 | 4,068 |
| |  | ④ | 33.6 | 4.7 | 7.8 | 3,395 |
| |  | ⑤ | 17.1 | 4.7 | 6.4 | 1,356 |
| |  | ⑥ | 17 | 4.7 | 6.4 | 1,179 |
| |  | ⑦ | 16.9 | 4.7 | 6.4 | 948 |
| | | ⑧ | 16.9 | 4.5 | 6.3 | 783 |
| | | ⑨ | 16.9 | 4.5 | 6.3 | 672 |
| | | | 4 | 4.9 | 10 | 397 |

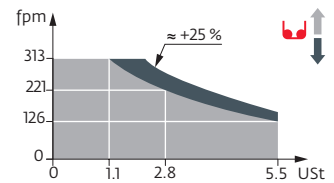
| | | | | | | |
|--|--|--|--|--|--|--|
| Pulley block | | | 4.8 | 1.2 | 4.9 | 838 |
| | | | 4.8 | 0.7 | 4.1 | 441 |
| Hoisting winch (+ rope) | | 50 LVF 90 HPL™ | 8.2 9.3 | 5 4.3 | 5.3 5.6 | 4,365 6,746 |
| Crane tower | | | L (ft) | W (ft) | H (ft) | lb (+/- 5%) |
| T61 | | □ 6.6 ft | 35.5 | 13.6 | 14.7 | 21,385 |
| K60/K40-2 | | □ 6.6/5.2 ft | 7.3 | 8.2 | 8.1 | 5,820 |
| K 447E KM 447E KM 449E K 649B KM 649E KRM 6410B | | □ 5.2 ft □ 5.2 ft □ 5.2 ft □ 6.6 ft □ 6.6 ft □ 6.6 ft | 33.5 33.5 33.5 33.6 33.8 33.6 | 5.3 5.3 5.3 6.8 6.7 6.9 | 5.3 5.3 5.3 6.7 6.7 6.8 | 7,474 7,088 8,830 11,663 10,692 15,653 |
| K 447A KMT 447A K 449A KMT 449A KR 649A KRMT 649A K 649A KMT 649A | | □ 5.2 ft □ 5.2 ft □ 5.2 ft □ 5.2 ft □ 6.6 ft □ 6.6 ft □ 6.6 ft □ 6.6 ft | 17.1 17.1 17.1 17.1 17.2 17.2 17.2 17.2 | 5.5 5.5 5.5 5.5 6.9 6.9 6.8 6.8 | 5.3 5.3 5.3 5.3 6.8 6.8 6.7 6.7 | 4,079 3,847 4,916 4,696 7,165 6,724 6,184 5,666 |
| K 447C KMT 447C K 649C KMT 649C KRMT 649C | | □ 5.2 ft □ 5.2 ft □ 6.6 ft □ 6.6 ft □ 6.6 ft | 11.3 11.6 11.7 11.7 11.7 | 5.5 5.5 6.8 6.8 6.9 | 5.3 5.3 6.7 6.7 6.8 | 2,998 2,976 4,376 4,542 5,401 |
| Fixing angles | | P 24A / P 42A P 63A / P 800B | 1.8 2.5 | 1.8 2.5 | 3.8 4.2 | 529 1,025 |
| Basic mast unit | | S 41A V 60A | 11.9 16.4 | 6.4 7.9 | 6.8 7.9 | 7,132 10,494 |
| Struts | | S 41A V 60A | 10.4 14.8 | 0.9 1 | 0.8 1 | 816 1,036 |
| Half-bearer | | S 41A V 60A | 16.7 22 | 2 2.3 | 5.8 7.6 | 2,315 4,057 |

Mechanisms

| 480 V - 60 Hz | | | | | | | | | | hp | kW | | | | |
|---------------|------------------|-----|---------|-----|-----|-----|-----|-----|-----|-----|---------|-------|----------|----|----------|
| | 50 LVF 25 Optima | fpm | 126 | 166 | 221 | 313 | 66 | 85 | 115 | 157 | 50 | 37 | 1,827 ft | | |
| | | USt | 5.5 | 4.1 | 2.8 | 1.1 | 11 | 8.3 | 5.5 | 2.5 | | | | | |
| | 90 HPL™ 25 | fpm | 213 | 279 | 392 | 518 | 707 | 110 | 146 | 203 | 271 | 353 | 90 | 66 | 3,136 ft |
| | | USt | 5.5 | 4.1 | 2.8 | 1.4 | 0.4 | 11 | 8.3 | 5.5 | 2.8 | 1.3 | | | |
| | 60 VVH 140 | min | 2 | | | | | | | | 60 | 45 | | | |
| | RVF 152 Optima + | rpm | 0 → 0.8 | | | | | | | | 2 x 5.5 | 2 x 4 | | | |
| | | | | | | | | | | | | | | | |

| IEC 60204-32 | kVA |
|------------------------|---|
| 480 V (+6% -10%) 60 Hz | 50 LVF: 107 kVA 90 HPL™: 139 → 103 kVA |

50 LVF 25 Optima



These most combinations meet the EN 14439 and ASME B30.3-2016 specifications for "out of service" wind conditions, provided the illustrated wind speed matches required design wind speed for the location of the tower crane. The "out of service" design wind speed was determined in accordance with ASCE 7-10, Figure 26.5-1A. The wind velocity, used for this configuration was 98 mph (158 kph), which represents a nominal design 3-second wind gust at 33 ft (10 m) above ground for Exposure B category. A factor of 0.85 was applied to the 700-year ultimate design wind speed of 115 mph (185 kph), per ASCE 37-02, with the assumption that this crane is considered a temporary structure used during a construction period of 2 years or less.

- Standard equipment
- Options
- Weathering position
- Reactions in service
- Lorry 44 ft
- Reactions out of service
- Container High Cube 40 ft, and/or Flat Rack 20 ft
- Jib weight
- Hoisting
- Total ballast weight
- Luffing
- Jib articulation axis
- 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.

