# Wire Rope Specifications

**555 SERIES 1, 2**

Liftcrane - Boom No. 84 With Open Throat Top

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**Wire Rope Lengths**

<table>
<thead>
<tr>
<th>Boom or</th>
<th>Whip Line</th>
<th>Rear or Auxiliary Drum</th>
<th>Hoist Line</th>
<th>Maximum Required Parts of Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom</td>
<td>1 Part</td>
<td>2 Part</td>
<td>1 Part</td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>Ft.</td>
<td>Ft.</td>
<td>Ft.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Meters</td>
<td></td>
<td>Meters</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>18.3</td>
<td>240</td>
<td>680</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>21.3</td>
<td>270</td>
<td>780</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>24.4</td>
<td>300</td>
<td>800</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>27.4</td>
<td>330</td>
<td>880</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>30.5</td>
<td>360</td>
<td>880</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>33.5</td>
<td>390</td>
<td>980</td>
<td></td>
</tr>
<tr>
<td>120</td>
<td>36.6</td>
<td>420</td>
<td>800</td>
<td></td>
</tr>
<tr>
<td>130</td>
<td>39.6</td>
<td>450</td>
<td>960</td>
<td></td>
</tr>
<tr>
<td>140</td>
<td>42.7</td>
<td>480</td>
<td>960</td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>45.7</td>
<td>510</td>
<td>960</td>
<td></td>
</tr>
<tr>
<td>160</td>
<td>48.8</td>
<td>540</td>
<td>960</td>
<td></td>
</tr>
<tr>
<td>170</td>
<td>51.8</td>
<td>570</td>
<td>960</td>
<td></td>
</tr>
<tr>
<td>180</td>
<td>54.9</td>
<td>600</td>
<td>960</td>
<td></td>
</tr>
<tr>
<td>190</td>
<td>57.9</td>
<td>630</td>
<td>960</td>
<td></td>
</tr>
<tr>
<td>200</td>
<td>61.0</td>
<td>660</td>
<td>960</td>
<td></td>
</tr>
<tr>
<td>210</td>
<td>64.0</td>
<td>690</td>
<td>960</td>
<td></td>
</tr>
<tr>
<td>220</td>
<td>67.1</td>
<td>720</td>
<td>960</td>
<td></td>
</tr>
<tr>
<td>230</td>
<td>70.1</td>
<td>750</td>
<td>960</td>
<td></td>
</tr>
<tr>
<td>240</td>
<td>73.2</td>
<td>780</td>
<td>960</td>
<td></td>
</tr>
<tr>
<td>250</td>
<td>76.2</td>
<td>810</td>
<td>960</td>
<td></td>
</tr>
<tr>
<td>260</td>
<td>79.2</td>
<td>840</td>
<td>960</td>
<td></td>
</tr>
<tr>
<td>270</td>
<td>82.3</td>
<td>870</td>
<td>960</td>
<td></td>
</tr>
<tr>
<td>280</td>
<td>85.3</td>
<td>900</td>
<td>960</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Hoist line and whip line lengths given in table will allow hook to touch ground. When block travel below ground is required, add additional rope equal to parts of line times added travel distance. Hoisting distance or line pull may be limited when block travel below ground is required.

9 parts of line requires upper boom point.
Wire Rope Specifications
555 SERIES 1, 2
Liftcrane - Boom No. 84 With Open Throat Top

<table>
<thead>
<tr>
<th>Hoist Reeving for Main Load Block</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. Parts of Line</td>
</tr>
<tr>
<td>Maximum Load Lbs.</td>
</tr>
<tr>
<td>Maximum Load kg</td>
</tr>
<tr>
<td>No. Parts of Line</td>
</tr>
<tr>
<td>Maximum Load Lbs.</td>
</tr>
<tr>
<td>Maximum Load kg</td>
</tr>
</tbody>
</table>

Maximum Spooling Capacities

| Front Drum: 28 mm Wire Rope - 6 Layers - 962 Ft. (293m) (Hoist Line) |
| Rear Drum: 28 mm Wire Rope - 6 Layers - 962 Ft. (293m) (Whip Line) |
| Auxiliary Drum: 28 mm Wire Rope - 6 Layers - 962 Ft. (293m) (Whip Line) |

18 Ft. (5m) is deducted from maximum spooling capacities for 3 dead wraps per drum.

Refer to Drum and Lagging Chart No. 8442-A.
## Wire Rope Specifications

### Rotation Resistant Wire Rope - 5:1 Safety Factor

<table>
<thead>
<tr>
<th>Line Type</th>
<th>Diameter</th>
<th>Wire Rope Type</th>
<th>Minimum Breaking Strength</th>
<th>Maximum Load</th>
<th>Approx. Weight</th>
<th>No Load Dia.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hoist Line</td>
<td>28 mm</td>
<td>Wire Rope With Pad Eye (MCC Part No. A00840)</td>
<td>168,800 Lbs. (750.8 kN)</td>
<td>33,000 Lbs. (14 970 kg)</td>
<td>2.63 Lbs Per Ft. (3.91 kg/m)</td>
<td>1.124 in. (28.55 mm) to 1.146 in. (29.11 mm)</td>
</tr>
<tr>
<td>Whip Line</td>
<td>28 mm</td>
<td>Wire Rope With Pad Eye (MCC Part No. A00840)</td>
<td>168,800 Lbs. (750.8 kN)</td>
<td>30,000 Lbs. (13 610 kg)</td>
<td>2.63 Lbs Per Ft. (3.91 kg/m)</td>
<td>1.124 in. (28.55 mm) to 1.146 in. (29.11 mm)</td>
</tr>
<tr>
<td>Auxiliary Line</td>
<td>28 mm</td>
<td>Wire Rope With Pad Eye (MCC Part No. A00840)</td>
<td>168,800 Lbs. (750.8 kN)</td>
<td>30,000 Lbs. (13 610 kg)</td>
<td>2.63 Lbs Per Ft. (3.91 kg/m)</td>
<td>1.124 in. (28.55 mm) to 1.146 in. (29.11 mm)</td>
</tr>
</tbody>
</table>
## Wire Rope Specifications

### Non-Rotation Resistant Wire Rope - 3.5:1 Safety Factor

<table>
<thead>
<tr>
<th>Line Type</th>
<th>Diameter</th>
<th>Wire Type</th>
<th>Part Number</th>
<th>Lay</th>
<th>Minimum Breaking Strength</th>
<th>Maximum Load</th>
<th>Approx. Weight</th>
<th>No Load Dia.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hoist Line</td>
<td>28 mm</td>
<td>6 X 36 Extra Extra Improved Plow Steel Wire Rope</td>
<td>A02479</td>
<td>Right Hand Regular Lay, IWRC</td>
<td>135,600 Lbs. (603.1 kN)</td>
<td>33,000 Lbs. (14,970 kg)</td>
<td>2.24 Lbs Per Ft. (3.33 kg/m)</td>
<td>1.124 in. (28.55 mm) to 1.146 in. (29.11 mm)</td>
</tr>
<tr>
<td>Whip Line</td>
<td>28 mm</td>
<td>6 X 36 Extra Extra Improved Plow Steel Wire Rope</td>
<td>A02479</td>
<td>Right Hand Regular Lay, IWRC</td>
<td>135,600 Lbs. (603.1 kN)</td>
<td>30,000 Lbs. (13,610 kg)</td>
<td>2.24 Lbs Per Ft. (3.33 kg/m)</td>
<td>1.124 in. (28.55 mm) to 1.146 in. (29.11 mm)</td>
</tr>
<tr>
<td>Auxiliary Line</td>
<td>28 mm</td>
<td>6 X 36 Extra Extra Improved Plow Steel Wire Rope</td>
<td>A02479</td>
<td>Right Hand Regular Lay, IWRC</td>
<td>135,600 Lbs. (603.1 kN)</td>
<td>30,000 Lbs. (13,610 kg)</td>
<td>2.24 Lbs Per Ft. (3.33 kg/m)</td>
<td>1.124 in. (28.55 mm) to 1.146 in. (29.11 mm)</td>
</tr>
</tbody>
</table>