How to Select a Winch

1. Determine the line pull required.
2. Determine the size (diameter) and length of cable required.
3. Where will the line load occur—on the first layer of cable on the drum barrel? The second? The third? Refer to the Line Pull and Cable Capacity Per Layer charts in Ramsey performance data on page 3 to determine the proper size winch to meet these line size, length and load requirements.
4. Select the proper winch model and determine the first layer rating required (all performance charts in this brochure are based on the first layer line pull ratings. All winches are rated based on first layer).

EXAMPLE: Customer "A" has a load that requires a 10,000 lb. line pull and has selected 60 ft. of 9/16" cable as the optimum length covering most of his use. His design requires a low mount winch. Referring to the charts in the performance data, he notes that 60 ft. of 9/16" cable will build up to three layers on a Model 700* and that the winch provides 10,500 lbs. maximum allowable line pull on the third layer. The first layer line pull rating of the Model H-700 (15,000 lbs.) is now used by customer "A" to determine the hydraulic pressure (PSI) required to provide 10,000 lbs. pull on the 3rd layer as shown on the Model H-700 performance data in this manual.

Line speeds shown on the charts in the brochure are also based on the first layer. (First layer line speeds are the slowest of any layer.)

*For performance using wire sizes other than the recommended size, contact the factory.

WARNING

Winches are not to be used to lift, support or otherwise transport personnel. A minimum of five (5) wraps of cable around the drum is necessary to support the rated load. Cable clamp is not designed to hold the load.

Limited Warranty Excerpt

Ramsey Winch warrants each new winch to be free from defects in workmanship for a period of one (1) year from date of purchase. The obligation under this warranty, statutory or otherwise, is limited to the replacement or repair at our factory of such part or parts as shall appear to us upon inspection to be defective in materials and workmanship. Complete warranty statement packed with each item.

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### Ramsey Winch Specifications

**H-7 Series**

- Rated Line pull 3,000lbs
- Recommended cable 1/4"
- Blocked Clutch
- Meets SAE-J706
- Made in the USA

**Applications**
- Towing & Recovery
- Forestry
- Construction
- Refuse

#### Applications

<table>
<thead>
<tr>
<th>LINE PULL (LBS) FIRST LAYER</th>
<th>0</th>
<th>500</th>
<th>1,000</th>
<th>2,000</th>
<th>3,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-7</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>HX-7</td>
<td></td>
<td></td>
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</tbody>
</table>

#### Recommended Cable

Recommended cable 1/4"

#### Dynamic & Static

<table>
<thead>
<tr>
<th>RATED LINE PULL</th>
<th>DYNAMIC</th>
<th>STATIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000 LBS</td>
<td>200 lbs</td>
<td>400 lbs</td>
</tr>
<tr>
<td>2,000 LBS</td>
<td>500 lbs</td>
<td>1,000 lbs</td>
</tr>
<tr>
<td>3,000 LBS</td>
<td>800 lbs</td>
<td>1,600 lbs</td>
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</table>

#### Line Speed

<table>
<thead>
<tr>
<th>LINE PULL (LBS) FIRST LAYER</th>
<th>0</th>
<th>500</th>
<th>1,000</th>
<th>2,000</th>
<th>3,000</th>
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<td>HX-7</td>
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#### Overall Dimensions

**H-7 Models only**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>H-7</td>
<td>12.00</td>
<td>1.75</td>
<td>8.98</td>
<td>4.94</td>
<td>5.58</td>
<td>2.41</td>
<td>5.54</td>
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<tr>
<td>HX-7</td>
<td>18.00</td>
<td>3.25</td>
<td>11.90</td>
<td>7.86</td>
<td>6.44</td>
<td>3.88</td>
<td>8.55</td>
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</tbody>
</table>

**H-8 Series**

- Rated Line pull 4,000lbs
- Recommended cable 5/16"
- Meets SAE-J706
- Made in the USA

**Applications**
- Towing & Recovery
- Forestry
- Construction
- Refuse

#### Applications

<table>
<thead>
<tr>
<th>LINE PULL (LBS) FIRST LAYER</th>
<th>0</th>
<th>500</th>
<th>1,000</th>
<th>2,000</th>
<th>3,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-8B</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>H8-B</td>
<td></td>
<td></td>
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</tbody>
</table>

#### Recommended Cable

Recommended cable 5/16"

#### Dynamic & Static

<table>
<thead>
<tr>
<th>RATED LINE PULL</th>
<th>DYNAMIC</th>
<th>STATIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,000 LBS</td>
<td>750 lbs</td>
<td>1,500 lbs</td>
</tr>
<tr>
<td>8,000 LBS</td>
<td>1,500 lbs</td>
<td>3,000 lbs</td>
</tr>
<tr>
<td>12,000 LBS</td>
<td>3,000 lbs</td>
<td>6,000 lbs</td>
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#### Line Speed

<table>
<thead>
<tr>
<th>LINE PULL (LBS) FIRST LAYER</th>
<th>0</th>
<th>500</th>
<th>1,000</th>
<th>2,000</th>
<th>3,000</th>
</tr>
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<tbody>
<tr>
<td>H-8B</td>
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</tr>
<tr>
<td>H8-B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Overall Dimensions

**H-8 Models only**

Note: Motor shown for H-8B models only.
H-200 Series

- Rated Line pull 8,000 lbs
- Recommended cable 3/8"
- Meets SAE-J706
- Made in the USA

Applications
- Towing & Recovery
- Petroleum
- Construction
- Forestry
- Refuse

Overall Dimensions
H-200/HY-200 Models only

<table>
<thead>
<tr>
<th>WINCH MODEL</th>
<th>A INCHES</th>
<th>B INCHES</th>
<th>C INCHES</th>
<th>D INCHES</th>
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</thead>
<tbody>
<tr>
<td>H-200</td>
<td>7.36</td>
<td>10.6</td>
<td>267.3</td>
<td>227.0</td>
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<tr>
<td>HY-200</td>
<td>5.28</td>
<td>6.31</td>
<td>11.44</td>
<td>8.12</td>
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</tbody>
</table>

Lever Style Clutch

RAM-LOK® Clutch

DOW-LOK® Clutch

Specifications

<table>
<thead>
<tr>
<th>Rated Line Pull</th>
<th>8,000 lbs.</th>
<th>(3,620 kg)</th>
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</thead>
<tbody>
<tr>
<td>Gear Reduction</td>
<td>H-200......</td>
<td>HD-1</td>
</tr>
<tr>
<td></td>
<td>H-246......</td>
<td>30:1</td>
</tr>
<tr>
<td></td>
<td>HD-200.....</td>
<td>24:1</td>
</tr>
<tr>
<td>Weight</td>
<td>H-200/H-246/HD-200/HD-234...115 lbs. (52 kg)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>H-200/HY-246/HDY-200/HDY-234...105 lbs. (48 kg)</td>
<td></td>
</tr>
</tbody>
</table>

Hydraulic Systems Performance

- RATED LINE PULL: 8,000 lbs.
- Dynamic Flow (GPM): 6.00
- Static Flow (GPM): 4.50
- Rated Line Pull: 15 GPM maximum flow rate.

* Performance based on a motor displacement of 3.6 CU in with 15 GPM maximum flow rate.
** Performance based on a motor displacement of 3.6 CU in with 15 GPM maximum flow rate.
*** Performance based on a motor displacement of 3.6 CU in with 15 GPM maximum flow rate.

*These specifications are based on recommended 3/8" diameter EIPS cable.

ramsey.com
**H-300 Series**

- Rated Line pull 9,000lbs
- Recommended cable 3/8" 
- Meets SAE-J706
- Made in the USA

**Specifications**

<table>
<thead>
<tr>
<th>Line Pull (First Layer)</th>
<th>9,000 lbs</th>
</tr>
</thead>
</table>

**Hydraulic Systems Performance**

- LINE PULL-FIRST LAYER (LB)

**Towing & Recovery**

- Overall Dimensions
  - 3,000
  - 5,000
  - 6,000
  - 7,000
  - 8,000
  - 9,000

- 3,000
- 4,000
- 5,000
- 7,000
- 8,000
- 9,000

- 3,000
- 4,000
- 5,000
- 7,000
- 8,000
- 9,000

**Applications**

- Towing & Recovery
- Forestry
- Mining
- Construction
- Refuse

**Hydraulic Systems Performance**

- H-300/HY-300 Models only

- Overall Dimensions

**Recommended cable 3/8"**

**Applications**

- Towing & Recovery
- Forestry
- Mining
- Construction
- Refuse

**Overall Dimensions**

- H-300/HY-300 Models only

**Lever Style Clutch**

**RAM-LOK® Clutch**

**HDG-350 Series**

- Rated Line pull 10,000lbs
- Recommended cable 7/16" 
- Meets SAE-J706
- Made in the USA

**Specifications**

<table>
<thead>
<tr>
<th>Line Pull (First Layer)</th>
<th>10,000 lbs</th>
</tr>
</thead>
</table>

**Hydraulic Systems Performance**

- LINE PULL-FIRST LAYER (LB)

**Towing & Recovery**

- Overall Dimensions
  - 3,000
  - 5,000
  - 6,000
  - 7,000
  - 8,000
  - 9,000

- 3,000
- 4,000
- 5,000
- 7,000
- 8,000
- 9,000

- 3,000
- 4,000
- 5,000
- 7,000
- 8,000
- 9,000

**Applications**

- Towing & Recovery
- Forestry
- Mining
- Construction
- Refuse

**Overall Dimensions**

- HDG-350 Models only

**Lever Style Clutch**

**RAM-LOK® Clutch**

**Applications**

- Towing & Recovery
- Forestry
- Mining
- Construction
- Refuse

**Overall Dimensions**

- HDG-350 Models only

**Lever Style Clutch**

**RAM-LOK® Clutch**

---

**Legend**

- H-300
- HY-300
- H-346
- HY-346

**Line Speed (MPM)**

- 10
- 15
- 20
- 30
- 60

**Rated Line Pull**

- H-300
- HY-300
- H-346
- HY-346

**Gear Reduction**

- H-300
- HY-300
- H-346

**Weight**

- H-300
- HY-300
- H-346
- HY-346

**Overall Dimensions**

- H-300
- HY-300
- H-346
- HY-346

**Recommended cable 7/16"**

**Applications**

- Towing & Recovery
- Forestry
- Mining
- Construction
- Refuse

**Overall Dimensions**

- HDG-350
- HDG-350

**Lever Style Clutch**

**RAM-LOK® Clutch**
H-400 Series

- Rated Line pull 10,000 lbs
- Recommended cable 7/16"*
- Meets SAE-J706
- Made in the USA

Specifications

<table>
<thead>
<tr>
<th>Rated Line Pull</th>
<th>10,000 lbs. (4,530 kgs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gear Reduction</td>
<td>40:1/40:1………………29:1</td>
</tr>
</tbody>
</table>

Hydraulic Systems Performance

H-400 Models only

Applications

- Towing & Recovery
- Forestry
- Mining
- Construction
- Refuse

**Recommended cable 1/2" (13mm) EIPS cable.
* Performance based on a motor displacement of 6.2 CU in with 23 GPM maximum flow rate.
** Weight based on a motor displacement of 6.2 CU in with 25 GPM maximum flow rate.

H-600 Series

- Rated Line pull 12,000 lbs
- Recommended cable 1/2"
- Meets SAE-J706
- Made in the USA

Specifications

<table>
<thead>
<tr>
<th>Rated Line Pull</th>
<th>12,000 lbs. (5,430 kgs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gear Reduction</td>
<td>H-600………………40:1</td>
</tr>
</tbody>
</table>

Hydraulic Systems Performance

H-600 Models only

Applications

- Towing & Recovery
- Forestry
- Mining
- Construction
- Refuse

**Recommended cable 1/2" (13mm) EIPS cable.
* Performance based on a motor displacement of 6.2 CU in with 25 GPM maximum flow rate.
** Weight based on a motor displacement of 6.2 CU in with 25 GPM maximum flow rate.

Overall Dimensions

H-400 Models only

Note: Model shown for H-400/HY-400 models only.

ramsey.com
**H-930 Series**

- Rated Line pull 30,000 lbs
- Recommended cable 3/4”
- Meets SAE-J706
- Made in the USA

**Applications**
- Towing & Recovery
- Petroleum
- Forestry
- Construction
- Refuse

**Hydraulic Systems Performance**

**H-930 Models only**

**Overall Dimensions**

**H-930 Models only**

**Options For Ramsey Hydraulic Worm Gear Winches**

- Model H200/H300 Level Winder
- Model H400 Level Winder
- Model H600 Cable Tensioner
- Model HX-700 Cable Tensioner

**Applications**

- Towing & Recovery
- Petroleum
- Forestry
- Construction
- Refuse

**Specifications: Conforms to SAE J706**

<table>
<thead>
<tr>
<th>Layer of Cable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line Pull ALL MODELS (lbs)</td>
<td>30,000</td>
<td>24,500</td>
<td>20,700</td>
<td>18,000</td>
</tr>
<tr>
<td>*Cable Capacity ALL MODELS (lbs)</td>
<td>7.6</td>
<td>9.0</td>
<td>10.5</td>
<td>15.5</td>
</tr>
<tr>
<td>Line Speed RPM</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

*These specifications are based on recommended cable of 3/4 inch (19mm) 6x19 EIPS cable.*