Hydraulic Winches
1 **Hydraulic Motor:**
Orbit, gear or optional piston motor on some models.

2 **Negative Static Multi Disc Brake:**
Is connected to the motor shaft and winch body. Pressurized oil from the hydraulic circuit opens the brake, and the springs automatically re-apply when pressure is released. The brake is automatically controlled by the hydraulic brake valve and is opened and closed by starting and stopping the motor.

3 **Planetary Reduction Stage:**
The overall dimensional size of the winch is very compact. Gear ratios of each model are selected to maximize line speed and line pull performance.

4 **Brake Control Valve:**
The brake control valve is a critical safety device that provides dynamic braking and is mounted directly onto the motor.

5 **Drum and Winch Frame:**
Our drums and frames are manufactured from structural steel or ductile iron castings to provide a durable and compact winch. The design of our compact winch family provides maximum flexibility for use in a wide variety of applications.
## TECHNICAL DATA AND DIMENSIONS

<table>
<thead>
<tr>
<th>Size</th>
<th>Line pull last rope layer (with layer comply with ANSI spec.B30.7) [lbs]</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 11</td>
<td>890</td>
</tr>
<tr>
<td>A 18</td>
<td>1450</td>
</tr>
<tr>
<td>A 24</td>
<td>2000</td>
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<tr>
<td>A 30</td>
<td>2500</td>
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<td>A 44</td>
<td>3350</td>
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<tr>
<td>A 55</td>
<td>4300</td>
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<tr>
<td>A 60</td>
<td>4900</td>
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<td>A 62-3</td>
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<td>A 62-4</td>
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</tr>
<tr>
<td>A 80</td>
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<tr>
<td>A 81-5</td>
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<td>A 81-6</td>
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<td>A 120-4</td>
<td>8720</td>
</tr>
<tr>
<td>A 150-5</td>
<td>10900</td>
</tr>
</tbody>
</table>
**Performance info: 5.23:1 ratio - 3.05 cu.in. disp. - 2250 PSI**

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td></td>
<td>1100</td>
<td>1000</td>
<td>950</td>
<td>890</td>
<td>840</td>
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<tr>
<td>Line speed @ 7.7 GPM [fpm]</td>
<td></td>
<td>164</td>
<td>176</td>
<td>189</td>
<td>200</td>
<td>214</td>
</tr>
</tbody>
</table>

Above specifications based on 1/4" wire rope diameter

- **Hoisting port**
  - 9/16" 18-UNF
- **Lowering port**
- **Lubrication oil plug** 3/8" BSP
- **Weight** 75

<table>
<thead>
<tr>
<th>Rope Dia. [in]</th>
<th>Layer</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>D/d</th>
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</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td></td>
<td>37</td>
<td>77</td>
<td>120</td>
<td>165</td>
<td>214*</td>
<td>25.5</td>
</tr>
<tr>
<td>5/16&quot;</td>
<td></td>
<td>30</td>
<td>62</td>
<td>97</td>
<td>135*</td>
<td>—</td>
<td>20.6</td>
</tr>
</tbody>
</table>

* This layer does not comply with ANSI spec. B30.7

- Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 310 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.20 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE
Performance info: 5.23:1 ratio - 4.88 cu.in. disp. - 2300 PSI

<table>
<thead>
<tr>
<th>Layer</th>
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<th>5</th>
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</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td></td>
<td>1800</td>
<td>1650</td>
<td>1550</td>
<td>1450</td>
<td>1350</td>
</tr>
<tr>
<td>Line speed @ 7.7 GPM [fpm]</td>
<td></td>
<td>102</td>
<td>110</td>
<td>118</td>
<td>125</td>
<td>132</td>
</tr>
</tbody>
</table>

Above specifications based on 1/4” wire rope diameter

A Hoisting port  9/16” 18-UNF
B Lowering port

P Lubrication oil plug  3/8” BSP

<table>
<thead>
<tr>
<th>Rope Dia. [in]</th>
<th>Rope storage capacity [FT]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Layer</td>
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<tr>
<td></td>
<td>1</td>
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<tr>
<td>1/4”</td>
<td>37</td>
</tr>
<tr>
<td>5/16”</td>
<td>30</td>
</tr>
</tbody>
</table>

* This layer does not comply with ANSI spec. B30.7

- Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 310 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.20 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

THE PRESENT EQUIPMENT CAN’T BE USED TO LIFT PEOPLE
Performance info: 5.23:1 ratio - 6.10 cu.in. disp. - 2450 PSI

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td></td>
<td>2400</td>
<td>2190</td>
<td>2000</td>
<td>1860</td>
</tr>
<tr>
<td>Line speed @ 7.7 GPM [fpm]</td>
<td>82</td>
<td>90</td>
<td>98</td>
<td>106</td>
<td></td>
</tr>
</tbody>
</table>

Above specifications based on 5/16" wire rope diameter

- Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 310 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.20 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE
Performance info: 5.23:1 ratio - 7.63 cu.in. disp. - 2250 PSI

<table>
<thead>
<tr>
<th>Layer</th>
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<th>1</th>
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<tbody>
<tr>
<td>Line pull [lbs]</td>
<td>3000</td>
<td>2730</td>
<td>2500</td>
<td>2320</td>
<td></td>
</tr>
<tr>
<td>Line speed @ 15 GPM [fpm]</td>
<td>140</td>
<td>153</td>
<td>167</td>
<td>180</td>
<td></td>
</tr>
</tbody>
</table>

Above specifications based on 5/16” wire rope diameter

- Hoisting port 7/8” 14-UNF
- Lowering port
- Motor case drain 1/4” BSP
- Lubrication oil plug 3/8” BSP
- Weight 100 lbs

<table>
<thead>
<tr>
<th>Rope Dia. [in]</th>
<th>Rope storage capacity [FT]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Layer</td>
</tr>
<tr>
<td>5/16”</td>
<td>1</td>
</tr>
<tr>
<td>30</td>
<td>62</td>
</tr>
<tr>
<td>5/8”</td>
<td>25</td>
</tr>
</tbody>
</table>

* This layer does not comply with ANSI spec. B30.7

- Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 310 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.20 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE
Performance info: 4.77:1 ratio - 12.2 cu.in. disp. - 2450 PSI

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td></td>
<td>4400</td>
<td>4000</td>
<td>3650</td>
<td>3350</td>
<td>3100</td>
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<tr>
<td>Line speed @ 20 GPM [fpm]</td>
<td></td>
<td>141</td>
<td>155</td>
<td>170</td>
<td>184</td>
<td>200</td>
</tr>
</tbody>
</table>

Above specifications based on 3/8" wire rope diameter

- A Hoisting port
- B Lowering port
- D Motor case drain
- P Lubrication oil plug

Rope Dia. [in] | Rope storage capacity [FT] |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Layer</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>1</td>
</tr>
<tr>
<td>7/16&quot;</td>
<td>37</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>32</td>
</tr>
</tbody>
</table>

* This layer does not comply with ANSI spec. B30.7

- Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 455 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.25 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE
Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.

Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.

Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 545 ft-lbs.

Maximum back pressure on the return line: 72.5 PSI.

Always keep at least 3 wraps of cable on the drum for safety reasons.

Gear lubrication is achieved by splash oil bath.

Gear lubricant - hydraulic oil 0.25 gal.

Technical Specifications are subject to change without prior notice from manufacturer.

THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE
**Performance info:** 12.28:1 ratio - 6.10 cu.in. disp. - 2650 PSI

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull</td>
<td></td>
<td>6000</td>
<td>5400</td>
<td>4900</td>
<td>4500</td>
</tr>
<tr>
<td>Line speed @ 17 GPM</td>
<td></td>
<td>103</td>
<td>114</td>
<td>126</td>
<td>137</td>
</tr>
</tbody>
</table>

Above specifications based on 3/8” wire rope diameter

- Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 545 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 3 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.37 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

THE PRESENT EQUIPMENT CAN’T BE USED TO LIFT PEOPLE
Performance info: 26.5:1 ratio - 3.5 cu.in. disp. - 2450 PSI

<table>
<thead>
<tr>
<th>Layer</th>
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<th>2</th>
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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td>6000</td>
<td>5400</td>
<td>4920</td>
<td>4510</td>
<td>4160</td>
<td>3860</td>
<td>3600</td>
<td>3380</td>
<td></td>
</tr>
<tr>
<td>Line speed @ 21 GPM [fpm]</td>
<td>90</td>
<td>100</td>
<td>110</td>
<td>120</td>
<td>130</td>
<td>140</td>
<td>150</td>
<td>160</td>
<td></td>
</tr>
</tbody>
</table>

Above specifications based on 7/16” wire rope diameter

- Hoisting port
- Lowering port
- Lubrication oil plug
- 3/8” BSP
- Weight: 200

<table>
<thead>
<tr>
<th>Rope Dia. [in]</th>
<th>3/8”</th>
<th>7/16”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rope storage capacity [FT]</td>
<td>38</td>
<td>32</td>
</tr>
<tr>
<td>Layer</td>
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<td>124</td>
<td>172</td>
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<tr>
<td>3</td>
<td>172</td>
<td>225</td>
</tr>
</tbody>
</table>

* This layer does not comply with ANSI spec. B30.7

- Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.40 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

PERSONNEL HANDLING APPLICATIONS ON REQUEST
Performance info: 26.5:1 ratio - 4.0 cu.in. disp. - 2100 PSI

<table>
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<tr>
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<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td>6000</td>
<td>5400</td>
<td>4920</td>
<td>4510</td>
<td>4160</td>
<td>3860</td>
<td>3600</td>
<td>3380</td>
<td></td>
</tr>
<tr>
<td>Line speed @ 27 GPM [fpm]</td>
<td>100</td>
<td>112</td>
<td>123</td>
<td>134</td>
<td>145</td>
<td>156</td>
<td>167</td>
<td>179</td>
<td></td>
</tr>
<tr>
<td>Line speed @ 60 GPM [fpm]</td>
<td>223</td>
<td>248</td>
<td>273</td>
<td>297</td>
<td>322</td>
<td>346</td>
<td>371</td>
<td>396</td>
<td></td>
</tr>
</tbody>
</table>

Above specifications based on 7/16” wire rope diameter

- Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.40 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

PERSONNEL HANDLING APPLICATIONS ON REQUEST
Performance info: 15.26:1 ratio - 7.67 cu.in. disp. - 2650 PSI

<table>
<thead>
<tr>
<th>Layer</th>
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<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull</td>
<td>[lbs]</td>
<td>8000</td>
<td>7200</td>
<td>6500</td>
<td>6000</td>
<td>5500</td>
</tr>
<tr>
<td>Line speed @ 17 GPM [fpm]</td>
<td>76</td>
<td>84</td>
<td>93</td>
<td>101</td>
<td>110</td>
<td></td>
</tr>
</tbody>
</table>

Above specifications based on 1/2” wire rope diameter

- Hoisting port: 7/8” 14-UNF
- Lowering port: 3/8” BSP
- Motor case drain: 1/4” BSP
- Lubrication oil plug: 3/8” BSP

<table>
<thead>
<tr>
<th>Rope Dia. [in]</th>
<th>Rope storage capacity [FT]</th>
<th>Layer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2”</td>
<td>55 117 184 258 338*</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

* This layer does not comply with ANSI spec. B30.7

- Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 545 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant: hydraulic oil 0.75 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

THE PRESENT EQUIPMENT CAN’T BE USED TO LIFT PEOPLE
Performanc info: 21:1 ratio - 5.14 cu.in. disp. - 3000 PSI

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td>8000</td>
<td>7200</td>
<td>6500</td>
<td>6000</td>
<td>5500</td>
<td>5100</td>
<td></td>
</tr>
<tr>
<td>Line speed @ 45 GPM [fpm]</td>
<td>195</td>
<td>216</td>
<td>238</td>
<td>281</td>
<td>303</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Line speed @ 65 GPM [fpm]</td>
<td>282</td>
<td>313</td>
<td>344</td>
<td>376</td>
<td>407</td>
<td>438</td>
<td></td>
</tr>
</tbody>
</table>

Above specifications based on 1/2” wire rope diameter

- Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.75 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.
Performance info: 21:1 ratio - 6.42 cu.in. disp. - 2500 PSI

<table>
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<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull</td>
<td></td>
<td>8000</td>
<td>7200</td>
<td>6500</td>
<td>6000</td>
<td>5500</td>
<td>5100</td>
</tr>
<tr>
<td>Line speed @ 45 GPM [fpm]</td>
<td></td>
<td>163</td>
<td>181</td>
<td>199</td>
<td>217</td>
<td>236</td>
<td>254</td>
</tr>
<tr>
<td>Line speed @ 65 GPM [fpm]</td>
<td></td>
<td>235</td>
<td>262</td>
<td>289</td>
<td>315</td>
<td>340</td>
<td>367</td>
</tr>
</tbody>
</table>

Above specifications based on 1/2” wire rope diameter

- Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.75 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

PERSONNEL HANDLING APPLICATIONS ON REQUEST
### Performance info: 64.1:1 ratio - 4.0 cu.in. disp. - 2570 PSI

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td>12000</td>
<td>10970</td>
<td>10100</td>
<td>9360</td>
<td>8720</td>
<td>8160</td>
<td></td>
</tr>
<tr>
<td>Line speed @ 45 GPM [fpm]</td>
<td>114</td>
<td>125</td>
<td>135</td>
<td>146</td>
<td>157</td>
<td>168</td>
<td></td>
</tr>
<tr>
<td>Line speed @ 65 GPM [fpm]</td>
<td>165</td>
<td>180</td>
<td>196</td>
<td>211</td>
<td>227</td>
<td>242</td>
<td></td>
</tr>
</tbody>
</table>

*Above specifications based on 9/16" wire rope diameter*

- **A** Hoisting port
- **B** Lowering port
- **P** Lubrication oil plug
- **Weight** 520 lbs

<table>
<thead>
<tr>
<th>Rope Dia. [in]</th>
<th>1/2&quot;</th>
<th>9/16&quot;</th>
<th>5/8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rope storage capacity [FT]</td>
<td>77</td>
<td>68</td>
<td>62</td>
</tr>
<tr>
<td>Layer</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>161</td>
<td>143</td>
<td>130</td>
</tr>
</tbody>
</table>

* This layer does not comply with ANSI spec. B30.7

- Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 1.8 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

**PERSONNEL HANDLING APPLICATIONS ON REQUEST**
Performance info: 62.7:1 ratio - 5.14 cu.in. disp. - 2550 PSI

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td>15000</td>
<td>13700</td>
<td>12600</td>
<td>11700</td>
<td>10900</td>
<td>10200</td>
<td></td>
</tr>
<tr>
<td>Line speed @ 45 GPM [fpm]</td>
<td>103</td>
<td>113</td>
<td>123</td>
<td>133</td>
<td>143</td>
<td>153</td>
<td></td>
</tr>
<tr>
<td>Line speed @ 80 GPM [fpm]</td>
<td>185</td>
<td>202</td>
<td>220</td>
<td>237</td>
<td>255</td>
<td>272</td>
<td></td>
</tr>
</tbody>
</table>

Above specifications based on 5/8” wire rope diameter

<table>
<thead>
<tr>
<th>Hoisting port</th>
<th>1” 5/16-12 THD SAE-16 ORB</th>
<th>Lubrication oil plug 3/8” BSP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowering port</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rope Dia. [in] | Rope storage capacity [FT] |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rope Dia. [in]</td>
<td>Layer</td>
</tr>
<tr>
<td>9/16”</td>
<td>75</td>
</tr>
<tr>
<td>5/8”</td>
<td>67</td>
</tr>
</tbody>
</table>

* This layer does not comply with ANSI spec. B30.7

- Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 2.5 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.
**Performance info:** 5.23:1 ratio - 3.05 cu.in. disp. - 2250 PSI

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td></td>
<td>1100</td>
<td>1000</td>
<td>950</td>
<td>890</td>
<td>840</td>
</tr>
<tr>
<td>Line speed @ 7.7 GPM [fpm]</td>
<td></td>
<td>164</td>
<td>176</td>
<td>189</td>
<td>200</td>
<td>214</td>
</tr>
</tbody>
</table>

Above specifications based on 1/4" wire rope diameter

- **A** Hoisting port
- **B** Lowering port
- **P** Lubrication oil plug 3/8” BSP
- **Weight** 75 lbs

<table>
<thead>
<tr>
<th>Rope Dia. [in]</th>
<th>1/4”</th>
<th>5/16”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rope storage capacity [FT]</td>
<td>Layer</td>
<td>1</td>
</tr>
<tr>
<td>1/4”</td>
<td>Layer</td>
<td>1</td>
</tr>
<tr>
<td>1/4”</td>
<td>37</td>
<td>77</td>
</tr>
<tr>
<td>5/16”</td>
<td>30</td>
<td>62</td>
</tr>
</tbody>
</table>

*This layer does not comply with ANSI spec. B30.7*

- Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 310 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.20 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE
**Performance info:** 5.23:1 ratio - 4.88 cu.in. disp. - 2300 PSI

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull</td>
<td>[lbs]</td>
<td>1800</td>
<td>1650</td>
<td>1550</td>
<td>1450</td>
<td>1350</td>
</tr>
<tr>
<td>Line speed @ 7.7 GPM</td>
<td>[fpm]</td>
<td>102</td>
<td>110</td>
<td>118</td>
<td>125</td>
<td>132</td>
</tr>
</tbody>
</table>

Above specifications based on 1/4" wire rope diameter

- **A** Hoisting port
- **B** Lowering port
- **P** Lubrication oil plug
- **Weight** 75

<table>
<thead>
<tr>
<th>Rope Dia. [in]</th>
<th>Rope storage capacity [FT]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layer</td>
<td>1</td>
</tr>
<tr>
<td>1/4&quot;</td>
<td>37</td>
</tr>
<tr>
<td>5/16&quot;</td>
<td>30</td>
</tr>
</tbody>
</table>

* This layer does not comply with ANSI spec. B30.7

- Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 310 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.20 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

*THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE*
**Performance info:** 5.23:1 ratio - 6.10 cu.in. disp. - 2450 PSI

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td>2400</td>
<td>2190</td>
<td>2000</td>
<td>1860</td>
<td></td>
</tr>
<tr>
<td>Line speed @ 7.7 GPM [fpm]</td>
<td>82</td>
<td>90</td>
<td>98</td>
<td>106</td>
<td></td>
</tr>
</tbody>
</table>

Above specifications based on 5/16" wire rope diameter

![Diagram of equipment with labels A and B]

- **A** Hoisting port
- **B** Lowering port
- **P** Lubrication oil plug
- **Weight** 75

<table>
<thead>
<tr>
<th>Rope Dia. [in]</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/16&quot;</td>
<td>30</td>
<td>62</td>
<td>97</td>
<td>135*</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>25</td>
<td>52</td>
<td>82*</td>
<td>—</td>
</tr>
</tbody>
</table>

*D This layer does not comply with ANSI spec. B30.7*

- Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 310 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.20 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

**THE PRESENT EQUIPMENT CAN’T BE USED TO LIFT PEOPLE**
Performance info: 5.23:1 ratio - 7.63 cu.in. disp. - 2250 PSI

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td>3000</td>
<td>2730</td>
<td>2500</td>
<td>2320</td>
<td></td>
</tr>
<tr>
<td>Line speed @ 15 GPM [fpm]</td>
<td>140</td>
<td>153</td>
<td>167</td>
<td>180</td>
<td></td>
</tr>
</tbody>
</table>

Above specifications based on 5/16” wire rope diameter

A Hoisting port
B Lowering port
D Motor case drain
P Lubrication oil plug

Rope Dia. [in] | Rope storage capacity [FT] | Layer | D/d |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5/16”</td>
<td>30</td>
<td>62</td>
<td>97</td>
</tr>
<tr>
<td>3/8”</td>
<td>25</td>
<td>52</td>
<td>82*</td>
</tr>
</tbody>
</table>

* This layer does not comply with ANSI spec. B30.7

- Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 310 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.20 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE
Performance info: 4.77:1 ratio - 12.2 cu.in. disp. - 2450 PSI

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td>4400</td>
<td>4000</td>
<td>3650</td>
<td>3350</td>
<td>3100</td>
<td></td>
</tr>
<tr>
<td>Line speed @ 20 GPM [fpm]</td>
<td>141</td>
<td>155</td>
<td>170</td>
<td>184</td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>

Above specifications based on 3/8” wire rope diameter

- **A** Hoisting port
- **B** Lowering port
- **D** Motor case drain
- **P** Lubrication oil plug

### Technical Specifications
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.25 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE
Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.

Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.

Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 545 ft-lbs.

Maximum back pressure on the return line: 72.5 PSI.

Always keep at least 3 wraps of cable on the drum for safety reasons.

Gear lubrication is achieved by splash oil bath.

Gear lubricant - hydraulic oil 0.25 gal.

Technical Specifications are subject to change without prior notice from manufacturer.

THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE
### Performance info: 12.28:1 ratio - 6.10 cu.in. disp. - 2650 PSI

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull</td>
<td>[lbs]</td>
<td>6000</td>
<td>5400</td>
<td>4900</td>
<td>4500</td>
</tr>
<tr>
<td>Line speed @ 17 GPM</td>
<td>[fpm]</td>
<td>103</td>
<td>114</td>
<td>126</td>
<td>137</td>
</tr>
</tbody>
</table>

Above specifications based on 3/8” wire rope diameter

- **A** Hoisting port
- **B** Lowering port
- **D** Motor case drain
- **P** Lubrication oil plug

<table>
<thead>
<tr>
<th>Rope Dia. [in]</th>
<th>Rope storage capacity [FT]</th>
<th>Layer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3/8”</td>
<td>38</td>
<td>79</td>
</tr>
<tr>
<td>7/16”</td>
<td>32</td>
<td>68</td>
</tr>
</tbody>
</table>

*This layer does not comply with ANSI spec. B30.7*

- Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 545 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 3 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.37 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

**THE PRESENT EQUIPMENT CAN’T BE USED TO LIFT PEOPLE**
**Performance info:** 26.5:1 ratio - 3.5 cu.in. disp. - 2450 PSI

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td>6000</td>
<td>5400</td>
<td>4920</td>
<td>4510</td>
<td>4160</td>
<td>3860</td>
<td>3600</td>
<td>3380</td>
<td></td>
</tr>
<tr>
<td>Line speed @ 21 GPM [fpm]</td>
<td>90</td>
<td>100</td>
<td>110</td>
<td>120</td>
<td>130</td>
<td>140</td>
<td>150</td>
<td>160</td>
<td></td>
</tr>
</tbody>
</table>

Above specifications based on 7/16" wire rope diameter

- Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.40 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

**PERSONNEL HANDLING APPLICATIONS ON REQUEST**
**Performance info:** 26.5:1 ratio - 4.0 cu.in. disp. - 2100 PSI

<table>
<thead>
<tr>
<th>Line pull</th>
<th>6000</th>
<th>5400</th>
<th>4920</th>
<th>4510</th>
<th>4160</th>
<th>3860</th>
<th>3600</th>
<th>3380</th>
</tr>
</thead>
<tbody>
<tr>
<td>@ 27 GPM</td>
<td>100</td>
<td>112</td>
<td>123</td>
<td>134</td>
<td>145</td>
<td>156</td>
<td>167</td>
<td>179</td>
</tr>
<tr>
<td>@ 60 GPM</td>
<td>223</td>
<td>248</td>
<td>273</td>
<td>297</td>
<td>322</td>
<td>346</td>
<td>371</td>
<td>396</td>
</tr>
</tbody>
</table>

Above specifications based on 7/16" wire rope diameter

**Hoisting port**
- 1" 5/16-12 THD
- SAE-16 ORB

**Lowering port**
- 3/8" BSP

**Lubrication oil plug**
- 3/8" BSP

| Weight | 200 |

<table>
<thead>
<tr>
<th>Rope Dia. [in]</th>
<th>Rope storage capacity [FT]</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8&quot;</td>
<td>38  79 124 172 225 280 340 403 470*</td>
</tr>
<tr>
<td>7/16&quot;</td>
<td>32  68 108 151 197 248 302 360* —</td>
</tr>
</tbody>
</table>

* This layer does not comply with ANSI spec. B30.7

- Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.40 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.
Performance info: 15.26:1 ratio - 7.67 cu.in. disp. - 2650 PSI

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td>8000</td>
<td>7200</td>
<td>6500</td>
<td>6000</td>
<td>5500</td>
<td></td>
</tr>
<tr>
<td>Line speed @ 17 GPM [fpm]</td>
<td>76</td>
<td>84</td>
<td>93</td>
<td>101</td>
<td>110</td>
<td></td>
</tr>
</tbody>
</table>

Above specifications based on 1/2" wire rope diameter

- Standard hoisting drum rotation is clockwise (counterclockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 545 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.75 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

* This layer does not comply with ANSI spec. B30.7

THE PRESENT EQUIPMENT CAN'T BE USED TO LIFT PEOPLE
**Performance info:** 21:1 ratio  -  5.14 cu.in. disp.  -  3000 PSI

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td></td>
<td>8000</td>
<td>7200</td>
<td>6500</td>
<td>6000</td>
<td>5500</td>
<td>5100</td>
</tr>
<tr>
<td>Line speed @ 45 GPM [fpm]</td>
<td></td>
<td>195</td>
<td>216</td>
<td>238</td>
<td>260</td>
<td>281</td>
<td>303</td>
</tr>
<tr>
<td>Line speed @ 65 GPM [fpm]</td>
<td></td>
<td>282</td>
<td>313</td>
<td>344</td>
<td>376</td>
<td>407</td>
<td>438</td>
</tr>
</tbody>
</table>

*Above specifications based on 1/2” wire rope diameter*

- **Hoisting port**: 1” 5/16-12 THD SAE-16 ORB
- **Lubrication oil plug**: 3/8” BSP
- **Weight**: 330 lbs

<table>
<thead>
<tr>
<th>Rope Dia. [in]</th>
<th>Rope storage capacity [FT]</th>
<th>Layer</th>
<th>D/d</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/16”</td>
<td>63</td>
<td>1</td>
<td>20.4</td>
</tr>
<tr>
<td></td>
<td>132</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1/2”</td>
<td>55</td>
<td>3</td>
<td>18.0</td>
</tr>
<tr>
<td></td>
<td>117</td>
<td>4</td>
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<tr>
<td></td>
<td>184</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>258</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>338</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>424*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*This layer does not comply with ANSI spec. B30.7*

- Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.75 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.
**Performance info: 21:1 ratio - 6.42 cu.in. disp. - 2500 PSI**

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull</td>
<td>[lbs]</td>
<td>8000</td>
<td>7200</td>
<td>6500</td>
<td>6000</td>
<td>5500</td>
<td>5100</td>
</tr>
<tr>
<td>Line speed @ 45 GPM</td>
<td>[fpm]</td>
<td>163</td>
<td>181</td>
<td>199</td>
<td>217</td>
<td>236</td>
<td>254</td>
</tr>
<tr>
<td>Line speed @ 65 GPM</td>
<td>[fpm]</td>
<td>235</td>
<td>262</td>
<td>289</td>
<td>315</td>
<td>340</td>
<td>367</td>
</tr>
</tbody>
</table>

Above specifications based on 1/2” wire rope diameter

- **Hoisting port**: 1” 5/16-12 THD SAE-16 ORB
- **Lowering port**
- **Weight**: 330 lbs
- **Lubrication oil plug**: 3/8” BSP

<table>
<thead>
<tr>
<th>Rope Dia. [in]</th>
<th>Rope storage capacity [FT]</th>
<th>Layer</th>
<th>D/d</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/16”</td>
<td>63  132 208 290 377 472*</td>
<td>Layer</td>
<td>20.4</td>
</tr>
<tr>
<td>1/2”</td>
<td>55  117 184 258 338 424*</td>
<td>Layer</td>
<td>18.0</td>
</tr>
</tbody>
</table>

*This layer does not comply with ANSI spec. B30.7*

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- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 0.75 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.
Performance info: 64.1:1 ratio - 4.0 cu.in. disp. - 2570 PSI

Layer | 1 | 2 | 3 | 4 | 5 | 6
--- | --- | --- | --- | --- | --- | ---
Line pull [lbs] | 12000 | 10970 | 10100 | 9360 | 8720 | 8160
Line speed @ 45 GPM [fpm] | 114 | 125 | 135 | 146 | 157 | 168
Line speed @ 65 GPM [fpm] | 165 | 180 | 196 | 211 | 227 | 242

Above specifications based on 9/16” wire rope diameter

<table>
<thead>
<tr>
<th>Rope Dia. [in]</th>
<th>1/2”</th>
<th>9/16”</th>
<th>5/8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
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<tr>
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<tr>
<td>1</td>
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<td>4</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

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- Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 1.8 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.

PERSONNEL HANDLING APPLICATIONS ON REQUEST
Performance info: 62.7:1 ratio - 5.14 cu.in. disp. - 2550 PSI

<table>
<thead>
<tr>
<th>Layer</th>
<th>n</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line pull [lbs]</td>
<td>15000</td>
<td>13700</td>
<td>12600</td>
<td>11700</td>
<td>10900</td>
<td>10200</td>
<td></td>
</tr>
<tr>
<td>Line speed @ 45 GPM [fpm]</td>
<td>103</td>
<td>113</td>
<td>123</td>
<td>133</td>
<td>143</td>
<td>153</td>
<td></td>
</tr>
<tr>
<td>Line speed @ 80 GPM [fpm]</td>
<td>185</td>
<td>202</td>
<td>220</td>
<td>237</td>
<td>255</td>
<td>272</td>
<td></td>
</tr>
</tbody>
</table>

Above specifications based on 5/8” wire rope diameter

<table>
<thead>
<tr>
<th>Rope Dia. [in]</th>
<th>Rope storage capacity [FT]</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/16”</td>
<td>75</td>
</tr>
<tr>
<td>5/8”</td>
<td>67</td>
</tr>
</tbody>
</table>

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- Standard hoisting drum rotation is counterclockwise (clockwise on request). Winch rotation is defined when viewing the motor.
- Load control when lowering is achieved by the overcentre brake valve to ensure smooth performance.
- Operation of the internal negative static multi disc brake is automatic. Static brake torque is: 361 ft-lbs.
- Maximum back pressure on the return line: 72.5 PSI.
- Always keep at least 4 wraps of cable on the drum for safety reasons.
- Gear lubrication is achieved by splash oil bath.
- Gear lubricant - hydraulic oil 2.5 gal.
- Technical Specifications are subject to change without prior notice from manufacturer.
**HYDRAULIC WINCH SYSTEM**

| V1  | Lowering Line |
| V2  | Hoisting Line |
| C3  | Brake Connection |
| D   | Drain line Connection |

1) Mount the winch on a surface of adequate thickness and flatness and shim if over 0.020” out.
2) Select the delivery, return and drain line sizes proportional to the oil flow.
3) Connection ports on the valve are marked as follows:
   - A V2 = Hoisting Line
   - B V1 = Lowering Line; max. allowable back pressure must be > 14.5 PSI and < 72.5 PSI.
4) Hoisting rotation must be specified on your order. It is forbidden and dangerous to invert the A and B lines to adjust the hoisting rotation.
5) D D = drain line where stated, must always be connected directly to tank.
6) To ensure correct cable installation onto the drum, follow the instructions in the installation manual.
7) Use only open centre control valves to operate the winch. If a stack valve is used, use the valve closest to the return line to tank to control the winch. Connect V2 to the A port on the open centre control valve (as shown in the picture). V1 connects to the B port.
8) Proper hydraulic oil filtration must be provided to ensure correct winch operation. (suggested oil filtration 10 micron, max 25).
9) It is recommended to operate the winch, without load for 5 minutes with max flow and no cable during the start up period. Carry out the first lift under load to a max height of 3 feet.
10) Follow technical data stated in DINAMIC OIL documentation.
11) The system pressure relief valve must be set 435 PSI over the working pressure value shown on the technical data sheet for each winch.
12) Winches are not intended to lift people.
13) If the specifications and recommendations above are not adhered to, we will decline all warranty claims.
LEGAL NOTES

All information in this catalogue has been checked; in case of possible mistakes, we decline all responsibility.

Dinamic Oil reserves the right to amend the technical data of this catalogue without prior notice.

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