Hydraulic Winches
### 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>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>260</td>
<td>281</td>
<td>303</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

- **A** Hoisting port 1” 5/16-12 THD SAE-16 ORB
- **B** Lowering port
- **P** Lubrication oil plug 3/8” BSP
- **lb** Weight 330

<table>
<thead>
<tr>
<th>Rope Dia. [in]</th>
<th>Rope storage capacity [FT]</th>
<th>Layer</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/16&quot;</td>
<td>63</td>
<td>132</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>55</td>
<td>117</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.
HYDRAULIC WINCH SYSTEM

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

1 Open Center Control Valve
2 Max Pressure Relief Valve

INSTALLATION

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.

For all further information please contact Dinamic Oil S.p.A. Commercial Department.