Description

Hand pump model HP*-D are compact heavy duty pumps designed for industrial applications like operating small presses, fixtures as well as providing source of oil for hydraulically operated emergency equipments. These hand pumps are equipped with integral Rotary Directional Control Valve with two outlet ports for switching of the flow between the two sides of a double acting cylinder. The Rotary valve has pressure holding ability.

Hydraulic symbol

Unit dimensions

Dimensions in mm.

Hand pump mounting
S.H.C Screws M10x70L
2 nos (Grade12.9)
Tightening torque 77 Nm.
Technical specifications

Construction : Sealed piston with ball type suction and delivery valve.
Hydraulic medium : Mineral oil.
Maximum working pressure : Refer table no.1
Displacement : Refer table no.1
Oil tank capacity : 1.25 L
Oil tank displacement : 0.8 L
Force required at the end of the pump hand lever at max. pressure (Approx) : Refer table no.1
Viscosity range : 10 cSt to 380 cSt
Fluid temperature range : -20°C to +70°C
Fluid cleanliness requirement : ISO 4406 20/18/15 or better.
Mass (Approx) : Without Oil - 9 kg.

Table no. 1

<table>
<thead>
<tr>
<th>Specification</th>
<th>Unit</th>
<th>HP12</th>
<th>HP16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Working Pr.</td>
<td>bar</td>
<td>500</td>
<td>350</td>
</tr>
<tr>
<td>Displacement Capacity</td>
<td>cm^3/stroke</td>
<td>2.8</td>
<td>5</td>
</tr>
<tr>
<td>Force required at the end of the pump hand lever fully extended at maximum pressure (approx).</td>
<td>N</td>
<td>270</td>
<td>340</td>
</tr>
</tbody>
</table>

Note : Force required to operate the lever of Rotary DCV under pressure is approximately 150 N at 500 bar.

Ordering code

<table>
<thead>
<tr>
<th>HP</th>
<th>Hand pump</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>02</td>
</tr>
</tbody>
</table>

Design code subjected to change. Installation dimensions remain same for design code 01 thru 09.

With Rotary Directional Control Valve