2CBP Two Stage
High Volume Booster Pump

FEATURES AND BENEFITS

- **High performance** — Pressures to 1,000 PSI (69 BAR) on 2 or more booster lines simultaneously. Volumes to 80 GPM at 600 PSI (303 L/min @ 41.4 BAR)

- **Hard, fine-grain bronze, mixed-flow impeller design** — Hand-ground and balanced for maximum performance.

- **Spring-loaded mechanical pump seal** — Self-adjusting and self-lubricating.

- **Heavy-duty precision ground, deep groove bearings** — To ensure maximum life.

- **Choice of 4 pump ratios** — For optimum pump performance; matches most PTO/engine transmission combinations.

- **Available in engine or opposite engine rotation** — Maximizes PTO and transmission selector.

Hale's 2CBP two-stage centrifugal high pressure booster pump is high on performance but low on both power and maintenance requirements. It is driven by the truck transmission power take-off (PTO). Designed to save wear on your midship pump when high pressure at low flow is required or when performing pump and roll at low speeds. This lightweight pump serves well in an initial attack vehicle. Versatile and cost effective, the 2CBP can provide up to 1,000 PSI (69 BAR) or pressure at 20 GPM (76 L/min) and volumes up to 100 GPM (380 L/min).

The 2CBP booster pump features a fine-grain cast iron pump body and a top quality gearbox designed by Hale. Choose from four gear ratios to match most PTO/transmission/engine combinations. Pumps are available in engine or opposite engine rotation.

**PERFORMANCE**

Hale booster pumps are designed and built to produce a wide range of pressures and volumes. However, the pressure and volume you can obtain safely depends on the torque capacity of the truck's transmission case, power take-off and driveline components. All pump performance specs should be checked in advance, and the torque loads approved by the respective equipment manufacturer.

<table>
<thead>
<tr>
<th>GPM</th>
<th>L/MIN</th>
<th>PSI</th>
<th>BAR</th>
<th>HP</th>
<th>Kw</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>76</td>
<td>1000</td>
<td>69</td>
<td>54</td>
<td>40</td>
</tr>
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<td>60</td>
<td>227</td>
<td>800</td>
<td>55.2</td>
<td>60</td>
<td>45</td>
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<tr>
<td>80</td>
<td>303</td>
<td>600</td>
<td>41.4</td>
<td>53</td>
<td>39</td>
</tr>
<tr>
<td>100</td>
<td>379</td>
<td>300</td>
<td>20.7</td>
<td>40</td>
<td>30</td>
</tr>
</tbody>
</table>

*Actual pump performance will be subject to limits/losses imposed by suction and discharge piping.
Technical Specifications

Pump
Type: Two-stage centrifugal pump driven by truck transmission power take-off (PTO); engine or opposite engine rotation.

Pump ratios: 2.00:1 (2CBP2); 2.83:1 (2CBP3); 3.94:1 (2CBP4); 4.93:1 (2CBP5)

Suction: 2” female NPT thread
Discharge: 1-1/2” female NPT thread

Volute and head: heavy duty fine grain alloy cast iron; 30,000 PSI tensile strength

Impeller: Hard, fine grain bronze, fully machined and hand balanced, with smooth internal waterways and mixed flow vanes for maximum efficiency

Shaft: Stainless steel, corrosion resistant

Shaft seal: Long-life, maintenance-free, self adjusting mechanical seal

Testing: Hydrostatic and performance tested.

Gearbox
Type: Positive gear drive for low maintenance

Gears: High quality, heat treated steel alloy; spur-cut design

Bearings: Heavy-duty precision ground for maximum performance and long life.

Housing: Fine grain cast iron, 30,000 PSI tensile strength.

Dimensions: L x W x H 16-5/16” x 11” x 18-1/4” (414 mm x 279mm x 464mm)

Weight: 120 lbs (54 kg)

Optional Accessories

Discharge Valves
Electric rotary vane priming systems
Suction valves
Drain valves
Strainers
In-line valves
Thermal Relief Valve

Note: Product specifications are subject to change without notice.

Possible Positions of Discharge

Top view showing location of suction and discharge opening with pump assembled for engine rotation power take-off.

Top view showing location of suction and discharge openings with pump assembled for opposite engine rotation power take-off.