

- 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 takeoff (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).

features a finegrain 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

2CBP Selected Performance Data*					
GPM	L/MIN	PSI	BAR	HP	Kw
20	76	1000	69	54	40
60	227	800	55.2	60	45
80	303	600	41.4	53	39
100	379	300	20.7	40	30

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

# 2CBP Two Stage High Volume Booster Pump

#### **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

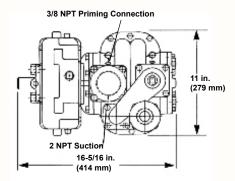
Volute and head: heavy duty fine grain alloy cast iron; 30,000 PSI

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.



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

#### 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 16-15/16" x 11" x 18-1/4"

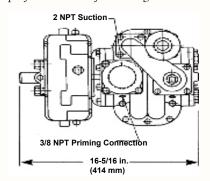
(414 mm x 279mm x 464mm) Weight: 120 lbs (54 kg) Optional Accessories

Discharge Valves

Electric rotary vane priming systems

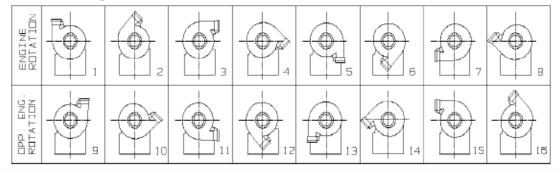
Suction valves
Drain valves
Strainers
In-line valves
Thermal Relief Valve

Note: Product specifications are subject to change without notice



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

## Possible Positions of Discharge



### Hale Products Inc.

Phone: 610/825-6300 ● Fax: 610/825-6440 ● www.haleproducts.com

Class 1®

Phone: 352/629-5020 • Fax: 352-629-2902 • www.class1.com

Copyright 2008 Hale Products Inc.

