



CBP Single Stage High Volume Attack/Booster Pump

Features and Benefits

High performance — Ideally suited for initial attack, booster, transfer auxiliary pump duty. Fully meets NFPA 1901 standards for auxiliary pump applications. Non-rated performance will provide volumes over 400 GPM at 100 PSI from booster tank operation; 50 GPM @ 400 PSI

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

Universal discharge design — 8 possible positions for optimum installation

Corrosion resistant integrated pump shaft and gear — One piece design for increased strength, minimizes shaft deflection; no need for outboard bearing support

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

Bronze clearance rings — Easily replaceable

Hale's CBP single-stage centrifugal high-volume, initial attack/booster pump series puts heavy-duty performance into a lightweight package. On an initial attack vehicle, tanker or mini pumper, this versatile powerhouse can pump over 400 GPM at 100 PSI (1515 L/min @ 6.9 bar) from booster tank operation — enough to control a fire until the big pumper arrives. The CBP pump models are driven by your truck transmission power take-off (PTO) and it can save war and tear on your midship pump.

Like all Hale pumps, the model CPB is designed and engineered for maximum reliability. It features a fine-grain cast iron pump body and a top-quality, heavy-duty gear box. Choose from four gear ratios to match with most PTO/engine combinations; two rotations, each with eight discharge positions available. No matter which configuration you specify, you're assured of outstanding performance.

Technical Specifications Pump

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

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

Suction: 3" female NPT thread

Discharge: 2" female NPT thread

Volume 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: Heat treated, corrosion resistant, one-piece integrated shaft and gear

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

Testing: Hydrostatic and performance tested. Tested and certified for NFPA rating at 250 GPM if required (must be requested when ordered).

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.

Optional Accessories

NFPA Certification (250 GPM)

Discharge Valves

Electric rotary vane priming systems

Suction valves

Relief valve systems

Drain valves

Strainers

In-line valves

Thermal Relief Valve

Auxiliary gearbox cooling

Note: Product specifications are subject to change without notice

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PERFORMANCE

Hale initial attack/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 takeoff and driveline components. All pump performance specs should be checked in advance, and the torque loads approved by the respective equipment manufacturer

CBP Selected Performance Data						
GPM	L/MIN	PSI	BAR	HP	KW	NOTES
400	1515	100	6.9	45	34	1
350	1325	150	10.3	50	37	1
**250	945	150	10.3	34	25	1,2
150	570	250	17.2	44	33	1,2,3
50	190	400	27.6	60	45	1,2,3

1. Performance based on tank operation using "average losses" for the 3 inches suction piping layout with a positive pump suction.
 2. Performance based on a 10-foot lift with 20-foot of 3 inches suction hose up to a 2,000 foot elevation using "average losses" for the truck's 3 inches suction piping.
 3. Performance based on a 10-foot lift with 20-foot of 2-1/2 inches suction hose up to a 2,000 foot elevation using "average losses" for the truck's 2-1/2 inches suction piping.
- *Actual pump performance will be subject to the limits/losses imposed by suction and discharge piping.
**NFPA rating available.

DIMENSIONS

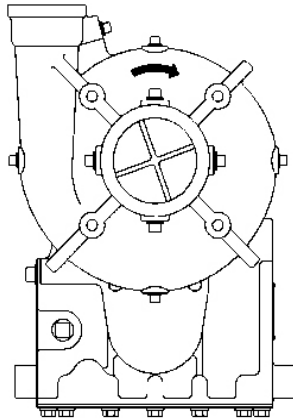
Weight: 82 - 88 lbs (37.2-40 kg)

Length: 12.75" (324 mm)

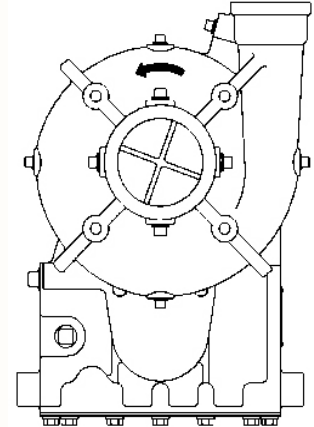
Height: 15.5" (394 mm)

Width: 10 - 15" (278 mm)

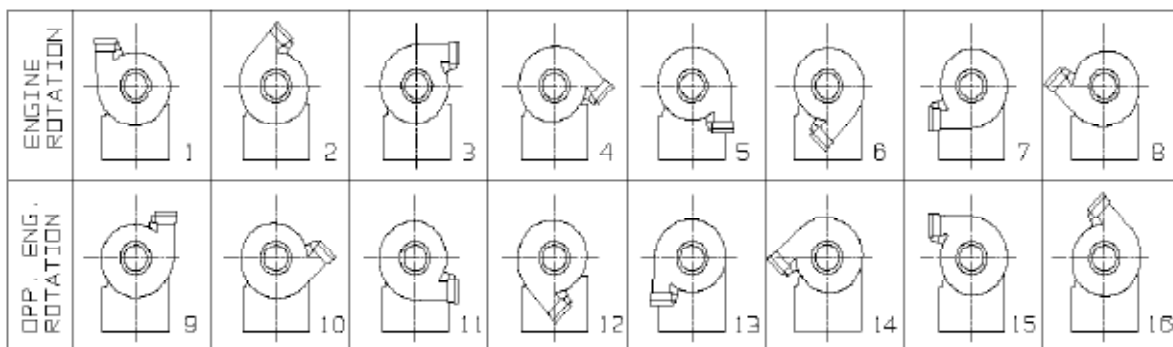
**ORIENTATION OF PUMP FOR
ENGINE ROTATION POWER
TAKEOFF**



**ORIENTATION OF PUMP FOR
OPPOSITE ENGINE ROTATION
POWER TAKEOFF**



Possible Positions of Discharge



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Class 1®

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