

Three different drive options — transmission PTO drive, direct engine mount, or hydraulic mount — make Hale's AP pump one of the most versatile pumps available. The AP is ideal for supply lines, preconnects, and booster lines in mini-pumpers, first-out units, and tankers.

The AP is available with optional suction and discharge manifolding to minimize piping requirements and is offered in either engine or opposite engine rotation. When performance counts, you can count on Hale's AP series.

## **Features**

- Choice of 4 pump ratios 2.00, 2.30, 2.55 or 2.85 to provide optimum pump performance
- Comes with spring loaded, self-lubricating, maintenance free self-adjusting mechanical pump seal
- Available in engine or opposite engine rotation maximizes PTO and transmission selection. Operates within many 6 bolt PTO torque and speed limits with 2.30:1 pump ratio
- Hard fine grain bronze mixed flow impeller design. Hand ground and balanced for maximum pump performance
- Easily replaceable bronze clearance rings

## Performance

Hale pumps are designed and manufactured to produce a wide range of volumes and pressures. The limits of volume and pressure you can safely obtain depend on the available power, limits of the drive components, and the water supply. Engine size, transmission and PTO torque limits or drive line components would be considerations in determining final performance. Preferred pump performance should be checked for torque compatibility with the respective manufacturers of all power or drive line components.

Serving Side-By-Side

# **AP Single Stage**

## High Volume Booster Pump

AP Selected Performance Data						
GPM	LPM	PSI	BAR	HP	Kw	Notes
700	2650	100	6.9	79	59	1
**500	1893	150	10.3	75	56	2
**450	1703	150	10.3	62	46	2
**350	1325	150	10.3	52	39	2
100	379	350	24.1	102	76	Ī

- 1. Performance based on tank operation using "estimated average losses" for the 5-in. piping on the truck and with a positive pump suction pressure.
- 2. Performance based on 10-ft lift with 20 ft. of 4-in. suction hose up to a 2,000-ft. elevation using "estimated average losses" for the truck's 5-in. suction piping.

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

## **Specifications**

#### **PUMP**

Type: Single stage centrifugal pump truck transmission PTO

Pump ratios: 2.00, 2.33, 2.55, 2.85

Suction: 5 inch Victaulic connection (standard). Suction is now available with: 4-1/2 inch NH or ISO 228/1-GTHD, 4 inch

female pipe thread (NPT)

Discharge: 3-inch female threaded flange 115 series removable (standard)

Volute and Head: Heavy duty, fine grain alloy cast iron; 30,000 PSI tensile strength Impeller: Bronze enclosed, hand ground and balanced for maximum efficiency

Clearance Rings: Replaceable bronze

Shaft Seal: Maintenance free, self-adjusting mechanical seal.

Testing: 500 PSI hydrostatic and performance tests performed at Hale's facilities. Tested and certified for NFPA rating if re-

quired. (Must be requested when ordered).

## **GEARBOX**

Type: Positive gear drive for low maintenance. Gears: High quality, heat treated steel alloy

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

Housing: High tensile alloy aluminum OPTIONAL ACCESSORIES

- · Discharge and suction manifold
- Electric rotary vane priming system
- · Suction manifold
- · Relief valve system
- Discharge, suction, in-line Torrent SVS Valves
- In-line tank valve with check valve
- Drain valves
- Tachometer drive and cable
- NFPA Certification available at 300, 350, 450, and 500 GPM
- Thermal relief valve





## Hale Products Inc.

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