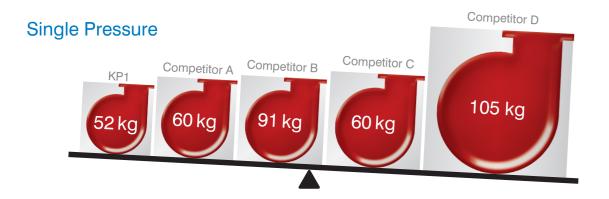
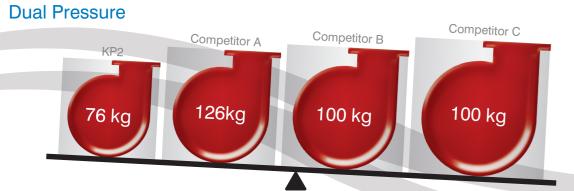
Reduced whole life cost of ownership

The rising cost of maintenance was a major priority when designing the KP series.

- Optional oil used in the gearbox can have a 5 year maintenance interval in order to save time and reduce costs
- An oil sight glass is included so oil levels can be quickly assessed without disturbing plumbing
- The mechanical seal can be changed without removing the pump from the vehicle
- The primer was designed so that with the removal of two bolts the assembly containing the seals can be removed and maintained on a workbench instead of in the rear locker
- The primer's state-of-the-art construction means only one piston is required

Small in size, lighter than the competition





Key Performance Features

Performance Data	KP1	KP2
EN1028 Rated Performance (At 10 bar with 3m lift)	FPN 10-750 FPN 10-1000 FPN 10-1500 FPN 15-1000	FPN 10-750 / FPH 40-250 FPN 10-1000 / FPH 40-250 FPN 10-1500 / FPH 40-250 FPN 15-1000 / FPH 40-250
Maximum output at 10 bar	2125 l/min	1900 I/min
Maximum Outlet Pressure - Low Pressure (EN compliance)	17 bar	17 bar
Maximum Flow – Low Pressure	2200 l/min	1975 I/min
Maximum Outlet Pressure - High Pressure (EN compliance)	N/A	54.5 bar
Maximum Flow – High Pressure	N/A	550 l/min
Dimensions - LxWxH (mm)	493 x 300 x 457	527 x 316 x 538
Weight (aluminium, bronze)	52 kg, 79 kg	76 kg, 118 kg
Priming time to 7.5m with 100mm suction line	30 seconds	
Priming Speed (recommended) - impeller rpm	3000 rpm	
Maximum Suction Pressure	12 bar	
Maximum Recommended Speed - impeller rpm	6000 rpm	
Minimum Idle Speed - impeller rpm	1500 rpm	
Thermal Relief Valve Activation	42°C or 74°C	

All weights and dimensions are based upon the standard build configuration

Gear Ratios Available – 1.90:1, 2.33:1, 2.91:1 Suction Flange – DIN 175, DN 100 Discharge Flange – 115, DN 65 Drive Flange – SAE 1410, DIN 100





Proudly ISO 9001 and ISO 14001 certified

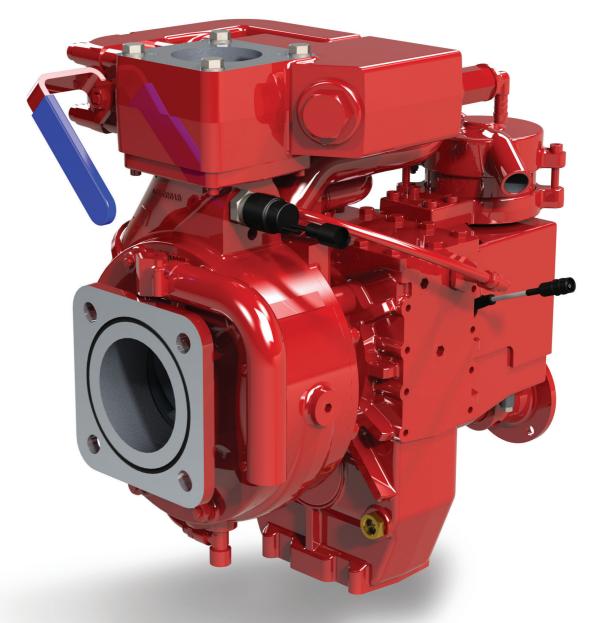
 Hale Products, Inc.

 607 NW 27th Ave, Ocala, FL 34475

 P: 800.533.3569
 F: 800.520.3473
 haleproducts.com



Big on performance small in size





The Hale KP series of rear or midship mounted PTO driven centrifugal fire pumps offers the ultimate in unrivalled performance up to 1500 LPM because only the KP offers both a single-pressure and a multi-pressure option, reduced whole life cost of ownership, is easily installed and maintained all in the smallest, lightest package in the market.

Big on performance

The KP pump comes configured as an EN1028 single pressure pump at 1500 L/min at 10 bar. It is also offered as an industry leading multi-pressure pump at 1500 L/min at 10 bar for normal pressure and 250 L/min at 40 bar for high pressure. High pressure variants are capable of flowing up to 400 L/min at 40 bar.

When **size** matters

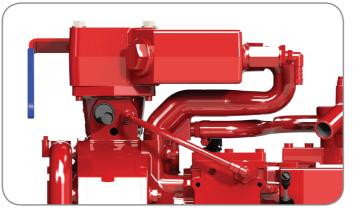
With the KP series there is no compromise between performance and size. Now you can select a single or a multi-pressure pump with one of the most compact footprints in the industry. In fact the KP single pressure pump is on average 40% smaller in cubic volume than the competition and the multi-pressure pump is on average 30% smaller in cubic volume than the comparable multipressure pumps. This frees up valuable space on the vehicle to carry more equipment or reduce the overall payload of the vehicle.

In addition to size we have made the KP pump significantly lighter. In fact the KP single-pressure pump is on average 30% lighter and the KP multi-pressure pump is on average 29% lighter than the competition.

The size and weight advantage between the KP pump and the competition makes it ideally suited for today's compact vehicle designs. It is now possible to install a high performance pump in a vehicle as small as 3.5 tonnes.



High performance, Small in size, Low cost of ownership

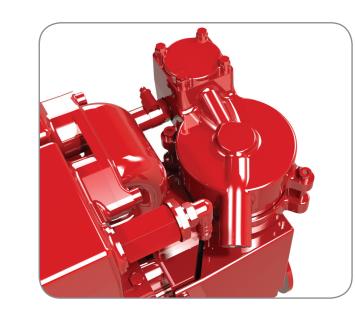


The KP pump is engineered symmetrical around the centerline. This makes the location of discharges for clockwise and counter-clockwise rotation pumps identical, greatly simplifying the installation time and costs.

In addition to being symmetrical the volute is offered in the standard, vertical orientation but can also be ordered with the discharge to the left or right (Single-pressure model only).



The high pressure stage of the KP pump is designed to discharge up to 400 L/min allowing the end-user to operate multiple high pressure hose reels at the same time.



To reduce maintenance costs the piston primer is a true dry running design with no forced

mechanical maintenance. An electronic clutch is included with the primer for fully automatic

ensuring it is not activated at high speeds. This interlock increases the life expectancy and

reliability of the priming system which significantly reduce maintenance costs.

or manual priming. Electronic safety interlocks are an integral part of the piston primer design

The standard inclusion of a gearbox allows the KP pump to be installed in virtually every commercial chassis in the market. Even with the addition of the gearbox we are still lighter and smaller than the competition. In order to fit the various chassis' the gearbox can be mounted in the down, left or right position, as shown below. In addition there are three gearbox ratios available to suit most engine and PTO applications.

To reduce downtime and maintenance costs the gearbox design incorporates elements that allow the oil changes to only once every 5 years, when installed and operated in accordance with our O&M instructions





Available in light alloy or Gunmetal versions