



KP Pump

**Big** on performance  
**small** in size



# High Performance

The Hale KP series of rear or midship mounted PTO driven centrifugal fire pumps offers the ultimate in unrivalled performance up to 500 GPM because only the KP offers both a single-pressure and multi-pressure option, reduced while 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 NFPA 1901 single pressure pump at 500 GPM. It is also offered as an industry leading multi-pressure pump at 500 GPM for normal pressure and 66 GPM at 600 PSI for high pressure. High pressure variants are capable of flowing up to 106 GPM at 600 PSI.

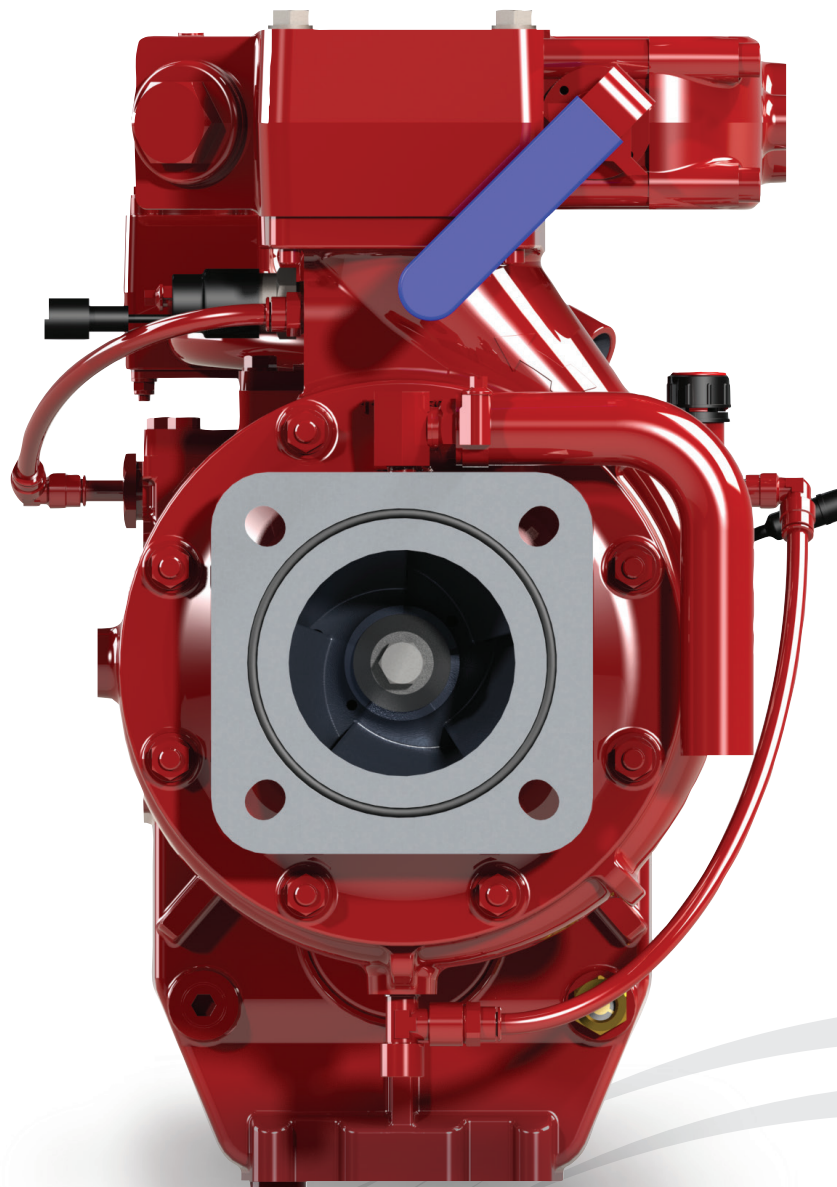
## When size matters

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 multi-pressure pumps. This frees up valuable space on the vehicle to carry more equipment or reduce the overall payload of the vehicle.

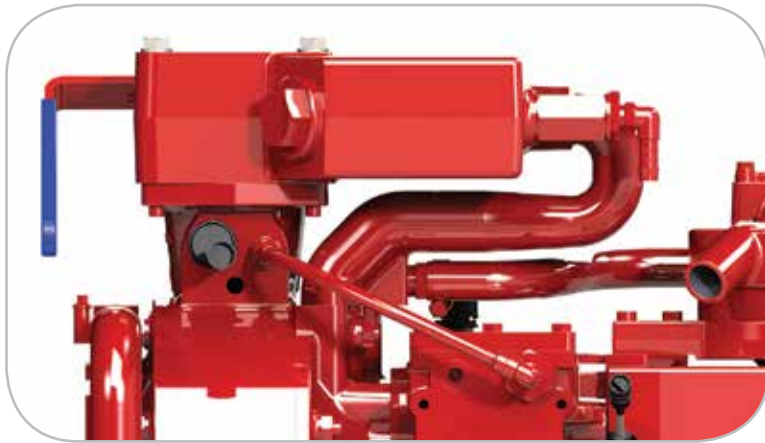
In addition to size we have made the KP pump significantly lighter. In fact the KP single-pressure pump is on average 30% lighter and the KP multi-pressure pump is on average 29% lighter than the competition.

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 ton.

*Available in light alloy or bronze versions.*



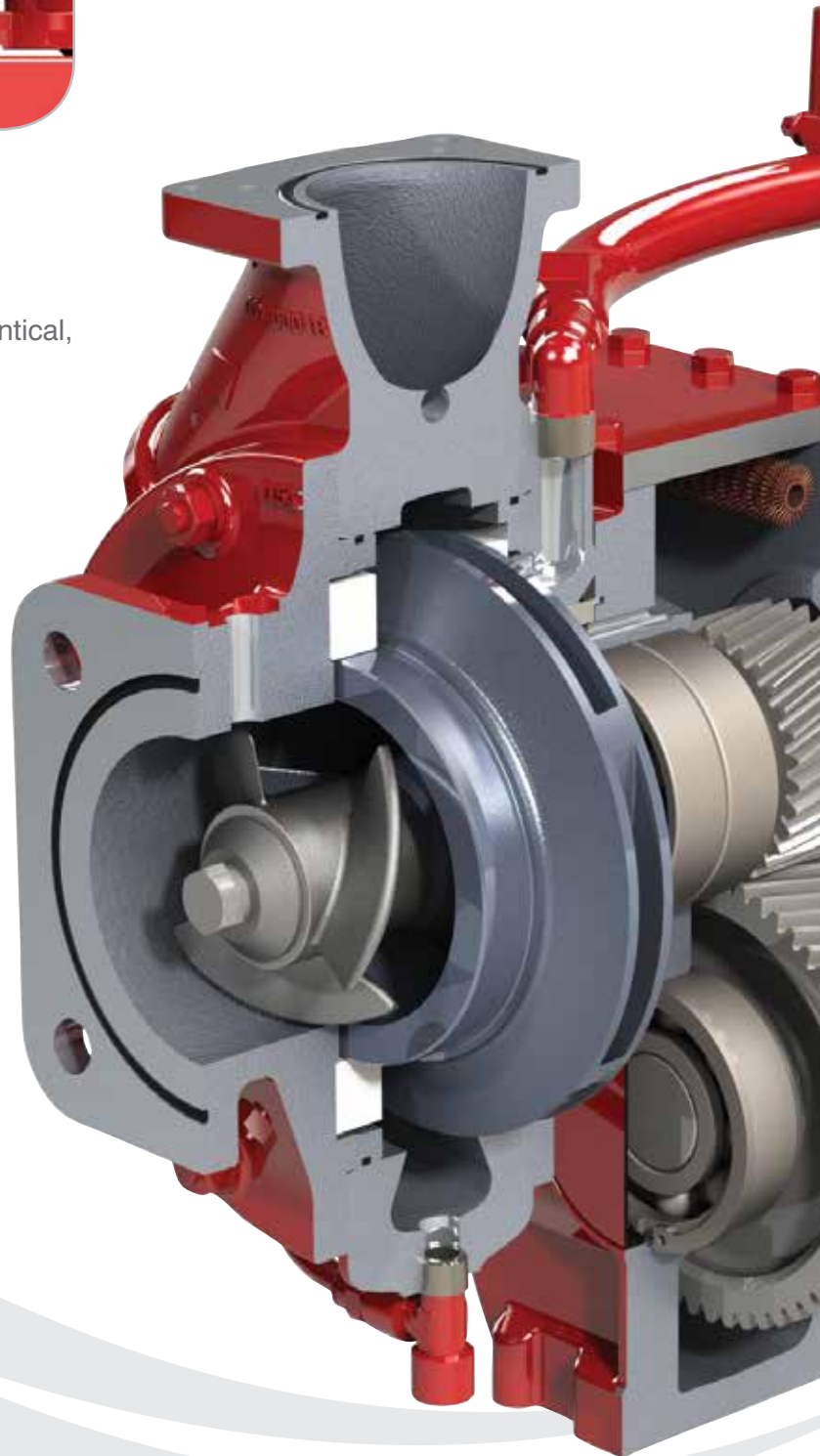
# Small In Size



The high pressure stage of the KP pump is designed to discharge up to 106 GPM allowing the end-user to operate multiple high pressure hose reels at the same time.

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.

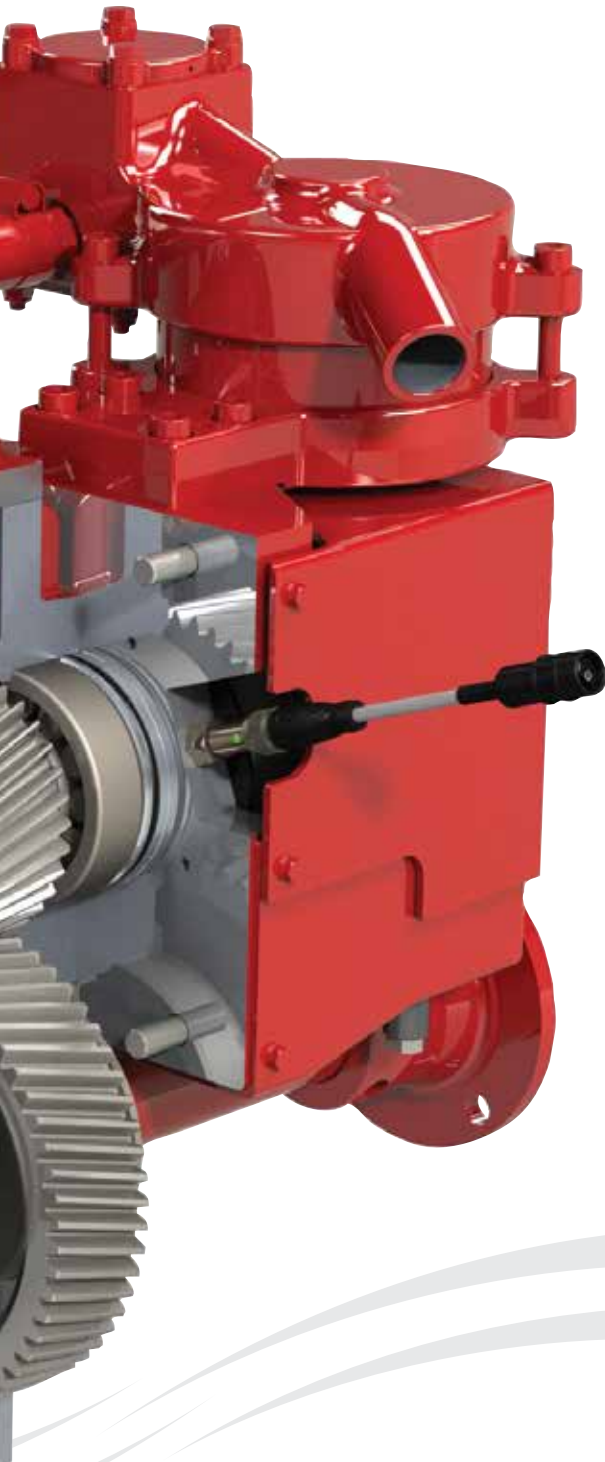
In addition to being symmetrical the volute is offered in the standard, vertical orientation but can also be ordered with the discharge to the left or right (Single-pressure model only).





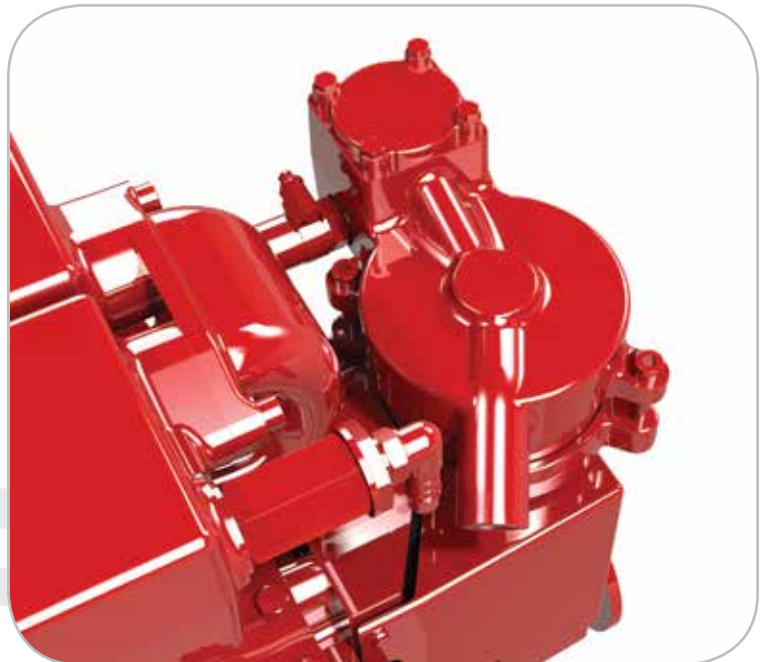
# Low Cost Of Ownership

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



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.



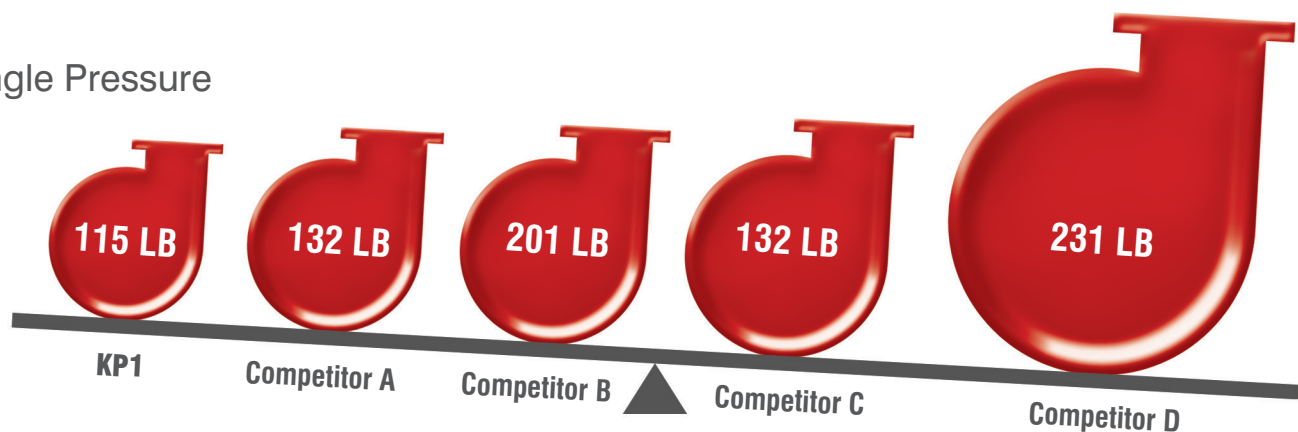
## Reduced whole life cost of ownership

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

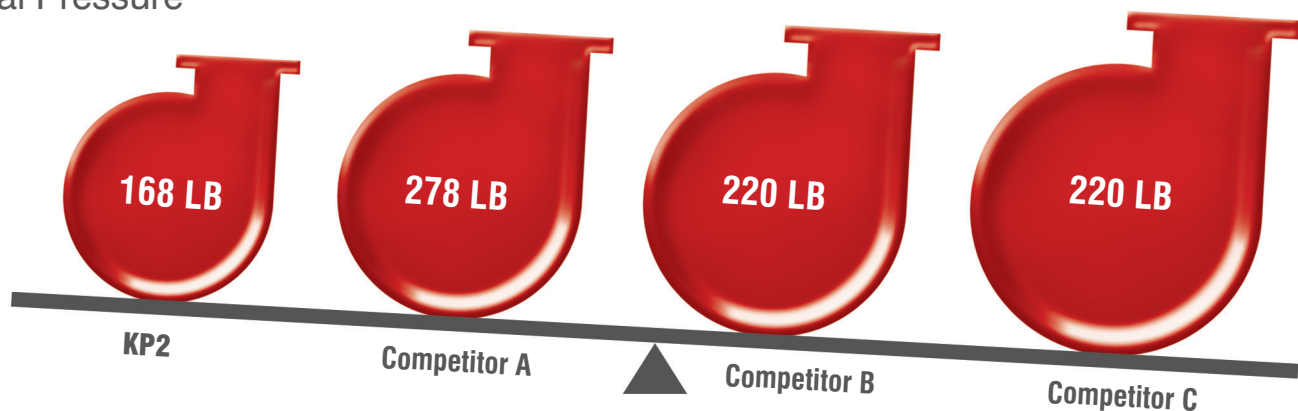
- Optional oil used in the gearbox can have a 5 year maintenance interval in order to save time and reduce costs
- An oil sight glass is included so oil levels can be quickly assessed without disturbing plumbing
- The mechanical seal can be changed without removing the pump from the vehicle
- The primer 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

### Single Pressure



### Dual Pressure



## Key Performance Features

PERFORMANCE DATA	KP1	KP2
NFPA 1901 Rated Performance	500 GPM	500 GPM
Maximum Outlet Pressure – High Pressure	N/A	790 PSI
Maximum Flow – High Pressure	N/A	145 GPM
Dimensions - LxWxH (m)	19.4 x 11.8 x 18.0	20.7 x 12.4 x 21.2
Weight (aluminium, bronze)	115 lb, 174 lb	168 lb, 260 lb
Priming Speed (recommended) – impeller rpm	3000 rpm	
Maximum Recommended Speed – impeller rpm	6000 rpm	
Minimum Idle Speed – impeller rpm	1500 rpm	
Thermal Relief Valve Activation	108°F or 165°F	

All weights and dimensions are based up on 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