

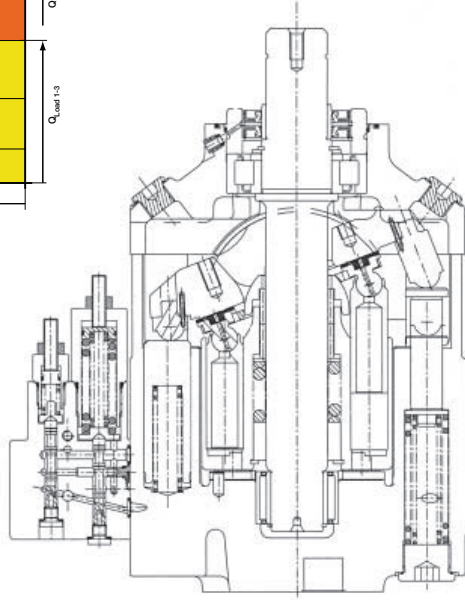
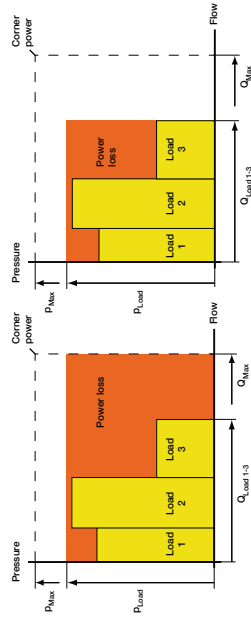
## The VP1 family

The VP1 series has been specially developed for demanding applications where many functions are used at the same time. High efficiency, high self-priming speed, low weight, small installation dimensions and high reliability are among its most important characteristics. The pumps are suitable for a number of mobile, marine and industrial applications and are available in three sizes. Together with the rest of the Parker product range, a well-balanced hydraulic system in which every component functions optimally can be achieved.

Technical data	Size:	VP1-45	VP1-75	VP1-120
<b>Displacement</b> (cm <sup>3</sup> /rev)		up to 45	up to 75	up to 120
<b>Flow</b> (l/min)		up to 108	up to 160*	up to 220*
<b>Working pressure</b> (bar)	max. intermittent	350	350	350
	max. continuous	300	300	300
<b>Self-priming speed</b> (rev/min)		2400	2100	1800
<b>Max. input power</b> (kW)		60	90	125
	<b>Weight</b> (kg)	27	27	28

\* with 2 1/2" suction line

A load-sensing system with variable flow (the diagram on the right) gives a far higher efficiency than a conventional system in which the flow is the same regardless of how many functions are being used (the diagram on the left). The heat generated and the noise level are reduced, while the various functions can be operated with greater precision.



The 11-piston design contributes to the very low noise and pulsation levels of the VP1-120. Variable displacement gives low losses and contributes to low fuel consumption and a better environment.

For detailed technical information, see catalogue no. HY17-8221/UK.

Subject to modification.



**Parker Hannifin**  
Mobile Controls Division  
SE-461 82 Trollhättan  
Sweden  
Tel.: +46 520 40 45 00  
Fax: +46 520 371 05  
[www.parker.com/euro\\_mcd](http://www.parker.com/euro_mcd)

Bulletin HY17-8221-B1/UK  
2M 03/04 S&S  
© Copyright 2004  
Parker Hannifin Corporation  
All rights reserved



www.parker.com

# Variable Hydraulic Pump Series VP1-120



# VP1-120 makes your load-sensing hydraulic system perfect

**NEW! The world's most powerful variable truck pump**



## Variable flow – the right choice for flexible functions

Parker's variable pumps VP1-45 and VP1-75 have been used for many years in mobile applications where several functions are used at the same time. Now we take one step further and introduce the VP1-120 – the world's largest variable truck pump, developed to meet the demands of truck cranes which need a very high flow rate. The VP1-120 is suitable for all load-sensing valve systems, regardless of make, and can easily be mounted directly on the truck PTO.

## Lower energy consumption

Truck cranes with load-sensing hydraulic systems are a typical application that exploits all the advantages of the new VP1-120. At every instant, the pump supplies the hydraulic system with exactly the right amount of oil. The heat losses are significantly reduced and with them the fuel consumption and exhaust emissions as well, contributing to a better environment.

## Powerful and reliable

The VP1-120 delivers up to 120 cm<sup>3</sup> per revolution, producing a flow that can be varied from zero to 220 litres per minute. The high capacity gives faster loading – there is always enough oil, in every situation. Just like the smaller members of the VP1 family, the new pump features long life, high reliability, high efficiency and a very high self-priming speed – all a result of Parker's years of experience in demanding mobile applications.

## A quiet, smooth running system

The variable flow means that there is no need to increase the engine speed for rapid movements and no surplus oil is pumped round the system. With the VP1-120, optimised inlets and low pulsations guarantee that the noise level of your hydraulic system will be low. The system will also run more smoothly and last longer, since there will be less stress on all the other components.

## Light and compact

Modern technology and optimised design solutions give the VP1-120 a high capacity and rugged construction, combined with small installation dimensions. The pump can be mounted without accessories directly on the PTO. Often a smaller hydraulic oil tank is sufficient and often no oil cooler is needed.

## Economy through efficiency

The good overall economy results from the interaction of many characteristics. The high capacity gives greater productivity, and the variable flow gives low operating and maintenance costs and longer life. You can rest assured that choosing a VP1-120 means trouble-free, efficient operation with optimal functionality for many years. And you get Parker's strong customer commitment, high delivery reliability and world-wide backup into the bargain!

## ADVANTAGES FOR YOU:

- Lower energy consumption
- Powerful and reliable
- Quieter and smoother
- Light and compact
- Better overall economy



Despite its unique high capacity, the VP1-120 is both light and compact, and can be mounted directly on the PTO without accessories

