



GENERAL PUMP COMPANY
SINCE 1975

PUMPING TO PERFECTION NOVEMBER/DECEMBER 2013

PRODUCT FOCUS See page 2

FIRE FIGHTER KITS



IS A FIRE PUMP WORTH IT?

“Why would I need a fire fighting pump?”

Last month saw the worst bushfires in decades, with hundreds of homes lost, and hundreds damaged.

Many think that using fire fighting equipment would be pointless against fires of such size and intensity. This is true in some cases, but since General Pump Company began 38 years ago, we have heard many personal accounts of fire fighting systems that have been left operating after home owners have fled their properties, who later returned to find their homes undamaged. It is worth making the investment to avoid so much heartache and inconvenience.

GPC stocks a range of portable engine driven pumps, hoses, nozzles, Storz fittings, hose reels and more. GPC custom builds larger diesel driven pumps for hydrants, hose reels and large sprinkler systems for commercial buildings and properties.

Don't be caught unprepared. Act now.
Call the pump specialists today! 1300 662 787

SUMP PUMP KITS

Need a sump pump kit for your application? And *fast*?



We stock a huge range of submersible sump pumps and pump controllers for many different applications. This means we can assemble sump pump kits tailored to your requirements at competitive prices, with quick delivery times and most importantly, provide a quality solution!

A typical sump pump kit includes one or more submersible sump pumps, a control panel and float switches. Options are endless, and if you require any extra pipe fittings or valves we can help out with this also. A family company with many years of experience, we provide advice free of charge, such as identifying the best pipe size or most suitable sump pump for your application.

Call our team of pump specialists today on 1300 662 787 with your sump pump kit specifications and requirements.

**If you missed our last edition, visit
www.generalpumps.com.au/news**

PRODUCT FOCUS

Looking for a good quality, fire fighting kit? Looking for a pump powered by a Honda engine that works reliably and successfully? General Pump Company has the solution... The Regent 3PKA series fire fighter pump coupled to a genuine Honda GX160 petrol engine.

The Regent 3PKA is a good quality robust fire fighting pump which has been sold to many customers who have used them successfully to combat bushfires. The 3PKA is a self priming pump which is useful when pumping from a water source below the pump. The Honda engines that are used with these pumps are a very well known and trusted engine, and when it comes to an approaching bushfire, nothing is more important than having an engine that actually starts! The kit comes complete with a 5 metre PVC suction hose fitted with a nut/tail connection and a strainer. The 20mm/3/4" PVC hose 20 metres long and fitted with a nut/tail connection and an adjustable 'Jetblast' fire hose nozzle. Options are endless from custom length suction and discharge hoses to storz and perculating hose.

Call us today on **1300 662 787** with your specifications.

REGENT 3PKA SERIES FIRE FIGHTER

**ALL METAL
CONSTRUCTION.
NO PLASTIC
WETTED PARTS
IN THIS PUMP**

Reliable and Genuine HONDA GX160 petrol engine

Heavy Duty steel carry handle

Self priming pump, aluminium housing and impeller

Heavy duty cast iron outlet connections with cast iron cap

Reinforced suction hose with fittings attached

PVC delivery hose with fire hose nozzle to connect to pump discharge outlet



*Price includes Regent 3PKA with GX160 HONDA, 1 x 5m x 40mm PVC suction hose with nut/tail and strainer, and 1 x 20m x 20mm PVC hose with nut/tail and nozzle. Price excludes delivery and GST. Subject to change without prior notice.



15mm Series for domestic applications

MADE IN EUROPE



Cast Iron series for closed loop heating and cooling systems



Bronze bodied series for potable water applications



High efficiency, energy saving 'New Motor Technology' series



Premium Dual Hot Water Circulator System



Standard Dual Hot Water Circulator System

HOT WATER CIRCULATOR PUMPS BY 'ULTRAFLOW'

- Great range with top quality
- Energy efficient
- Dependable performance
- Interchangeable with other brands
- Competitively priced
- Made in Europe

Circulating pumps are used extensively for circulating hot potable water for fast delivery to taps, and they are found in almost every building today. They are used with under floor heating and solar hot water systems.

'ULTRAFLOW' offers a great range beginning with the UFC15/15BT 15mm bronze pump fitted with a timer, through to the UFC32/80B 32mm bronze circulator pump in both cast iron and bronze construction.

General Pump Company also offers the preassembled dual pump package (pictured) which saves time and money on installation. Mounted on a pressed galvanised steel base, it includes two pumps fitted with valves, interconnecting stainless steel pipework, and a pump controller with programmable changeover timer.

The manufacturer of the 'ULTRAFLOW' range has been producing circulating pumps since 1949, so you can be assured when you purchase an 'ULTRAFLOW' circulating pump that it is a product that has been tried and proven many times over.

These circulating pumps operate successfully in many demanding applications around Australia. **Below is a testimony from the Maintenance Department of Nepean Hospital in western Sydney:**

"My manager approved of testing these pumps as we are always looking for ways to reduce energy consumption. Since we installed it, it has been working very well and is performing better than the other brand that is installed beside it. The return line is 1°C hotter which shows it is circulating better."

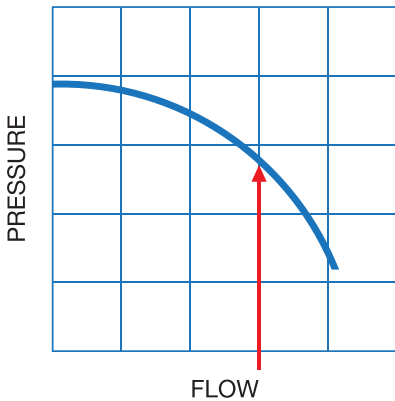
D.B, Nepean Hospital – Maintenance.

Q&A: DO YOU KNOW HOW TO READ A PERFORMANCE CURVE?

Q: How do I read a performance curve?

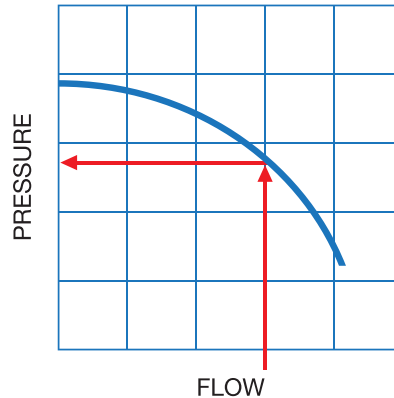
A: Performance curves can be confusing and difficult to understand. The important point to remember is that the 'flow' is proportional to the 'pressure'. i.e the more 'flow' the pump is pumping, less 'pressure' will be generated – alternately, the less 'flow' the more 'pressure'.

To read a performance curve firstly calculate determine the flowrate. On the horizontal axis of the graph, make a vertical line from where the flowrate is indicated on the graph, up the graph until it intersects the curved line as shown below.



Then, to determine the 'pressure' the pump will produce at that flowrate, draw a

horizontal line from where the vertical line has intersected the curve - as shown below.



Once you have drawn these lines, you can then determine how much pressure the pump will generate at the determined flow rate. You can also reverse the method to determine how much flow the pump is producing at the determined pressure.

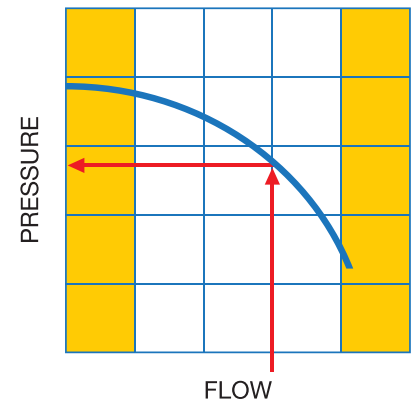
Often 'pressure' is measured in 'metres head'.

This can be converted into PSI, KPA or Bar by using the below conversion chart.

In the field, you can read what pressure the pump is producing by using a pressure gauge. By looking at the pump

performance curve you can calculate the flowrate by the 'pressure' reading that is on the gauge

It is very important to remember that pumps have 'range' where the pump should be operating. If it operates outside this range it can cause severe damage to the pump. As a rule of thumb, its good to prevent the pump from operating too close to the ends of the performance curve (as shaded in yellow below). The pump should operate within the mid section of the performance curve. If the pump is operating outside the optimum range, you will need to address the problem before it damages the pump. There are many different ways to do this and you can call **General Pump Company 1300 662 787** with any questions.



USEFUL CONVERSION CHARTS

UNITS OF FLOW						UNITS OF PRESSURE						UNITS OF VOLUME						
CONVERT TO CONVERT FROM	Imperial Gallons per min	US Gallons per min	Cubic Metres per hr	Litres per second	Litres per second	CONVERT TO CONVERT FROM	Kilo-pascal	Metre-head	Bar	Lbs per sq inch	Feet of water	Atmo-sphere	CONVERT TO CONVERT FROM	Litre pascal	Kilolitre	Cubic Metres	Imperial Gallons	US Gallons
	MULTIPLY BY						MULTIPLY BY					MULTIPLY BY						
Imperial Gallons per min	1	1.2	.273	.076	4.546	Kilopascal	1	0.102	.01	0.145	0.335	1	Litre	1	0.001	0.001	.220	.264
US Gallons per min	.833	1	.227	.630	3.787	Metrehead	9.804	1	0.098	1.42	3.28	0.098	Kilolitre	1000	1	1	220	264
Cubic Metres per hour	3.866	4.4	1	2.78	16.66	Bar	100	10.20	1	14.5	33.45	1	Cubic Metres	1000	1	1	220	264
Litres per second	13.19	15.85	3.6	1	60	Lbs per Sq inch	6.895	.704	0.069	1	2.307	0.069	Imperial Gallons	4.546	0.00454	1	1	1.201
Litres per minute	.219	.264	.06	.016	1	Feet of water	2.98	0.3048	0.03	0.4335	1	0.03	US Gallons	3.785	0.0038	0.0038	0.833	1
						Atmosphere	100	10.33	1.0	14.7	33.9	1						

Quote of the Month:

"The secret to success is consistency of purpose"



T 1300 662 787 F 1300 662 717 E sales@generalpumps.com.au W www.generalpumps.com.au

Disclaimer: Information contained in this newsletter is indicative only and may not be accurate. GPC, its staff and associated business will not be liable for any consequence of any kind or form resulting from the use of information in this publication. Please refer to a hydraulic consultant/engineer for approval prior to commencement of any work.