P.O.Box 644 6 reytown 3250 Cell 0825684437

MHydraulics

Hydraulic Drive Pumps

Ideal for small & large bush, timber and grass fires. Hydraulic Drive pump is a multi purpose water pump. Mainly used for fire fighting and water transfer, or cleaning lorries in off season. These pumps are low maintenance and very reliable. Simply connected to the tractor hydraulics and the oil will return directly to oil reservoir.

Advantages of the hydraulic drive pump

- •There is no PTO shaft that might cause an accident or break when fighting fire.
- No petrol engine that might not start or might disappear in the off season.
- No petrol taken to the fire.
- Just couple hydraulic hoses to tractor hydraulics and shift lever to operate.
- The unit can be mounted anywhere, because hydraulic hoses allow it.
- The hydraulic drive unit has proved to be very reliable.

Single



Twin Stage



Multi Stage



BB Cast Iron



Chemical pump





Single Stage Pump

The Single Stage pump is ideally used for small fires and fire breaks and has a water reach of 35 meters.

Performance One stage narrow pump:

- 30 l/min @ 12 bars using 4mm nozzle
- 240 l/min @ 6 bars using 12mm nozzle
- 325l/min @ 4 b bars using 16mm nozzle
- 450 I/min @ max volume open flow.
- minimum req. 22 l/min @ bars.)
- Low flow hydraulic motors for some MF tractor models optional.

One stage wide pump:

- 160 l/min @ 6 bars,
- 380 l/min @ 5 bars,
- 880 l/min max vol.
- Tractor hydraulics producing 35 l/min @ 180 bars (minimum req. 30 l/min @ 150 bars.)



Twin Stage Pump

The Twin Stage pump is ideally used for larger fires such as timber fires or large grass fires. Has reach of 45m.

Performance: Two stage wide pump:

- 40 I/min at 13 bars using 6mm nozzle
- 290/min at 10 bars using 12mm nozzle
- 400l/min at 6 bars using 16mm nozzle
- 550 l/min @ max volume.
- The tractor hydraulics producing 35 l/min @ 180 bars (minimum req. 30 l/min @ 150 bars.)

At maximum reach with a good 16mm nozzle, the water jet can reach 45 meters.



BB Cast Iron Pump

The BB Cast iron pump is a multi purpose pump meaning it can be used with chemicals as well as water. This pump is perfect for someone looking for a pump they can use all year round and not just during fire season. It can be used for firefighting, chemical pumping and irrigation.

Performance: BB Cast Iron Pump:

- 30 I/min at 9 bars using 4mm nozzle
- 71/min at 9 bar using 6mm nozzle
- 205/min at 9.5 bar using 10mm nozzle
- 260 l/min @ 7 bars with 12mm nozzle
- 685 I/min @ max volume @ 7.5 bar volume on 18mm nozzle with the tractor hydraulics producing 44 I/min @ 175 bars (minimum req. 40 I/min @ 150 bars.)

This pump has a water reach of 55m with hydraulic oil pressure from the tractor. Set at 44/min

Multi Stage (Rovatti) Pump

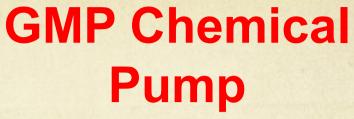


The Rovatti Multi stage pump is intended to be used for fire trucks with large amounts of water. This pump has the potential for huge performance if the hydraulic oil flow is over 70l/min. Recommended to be used on fire trucks.

Performance of Rovatti Multi Stage:

- 700 I/min at a minimum of 7.5 bars with the hydraulic oil flow rate set to 57 I/min @ 150bars. Using 18mm nozzle
- 725 l/min at 7.5 bars using 20mm nozzle
- 875/min at 7.5 bar using 22mm nozzle

Higher hydraulic oil flow rates and pressure will result in a much higher water pressure. It is advisable not to exceed 15 bars water pressure as water hoses might burst. Hydraulic oil flow rates should be set accordingly.





Ideal for transferring large amount of water and chemicals from wells, dams, ponds and reservoirs. Can also be used for spraying roads. High volume low pressure.

GMP Chemical Pump Performance:

1000 litres/min at transfer and 100 litres at 2.5 bar.

	Single Stage	Twin Stage	Multi Stage	BB Cast iron	Chemical Pump
Used for?	Small Fires, fire breaks	Larger Fires, timber yard, bush fires	Sugar Can fires, Timber.	Multi Purpose, Chemical and water pump	Water transfer
Hydraulic oil	Min 25I/ min of hydrauli c oil flow	Min 30I/min of hydraulic oil flow	Min 57/min hydraulic oil flow	Min 40l/min of hydraulic oil flow	25/min of hydraulic oil flow
Performance	250/min at 6 bar with 12 mm nozzle	400l/min at 6 bar with 16mm nozzle	700/min at 7.5 bar using 18mm nozzle	685/min at 7.5 bar with 18mm nozzle	100l/min at 2.5 bar
reach	35m	45m	55m plus	55m plus	







Accessories for fire fighting PVC Rotary coupler

-Designed to last and not rust after lengthy period. Proven to be very reliable. Its corrosion resistant and maintenance free

The coupler is designed in such a way that it can rotate which allows for more flexibility during fire fighting. The hose can rotate 360 deg.

Priming Pumps

For fast and reliable hand priming, the priming pumps are essential. "Selfpriming" a fire fighting pump can take a long time (minutes), especially, when water needs to be drawn up several meters from an open source via a long suction hose.

Monitor and 16mm branchpipe gun. Usually mounted onto fire truck.

• These Nozzles are designed for effective fire fighting

Designed with durable long lasting material.

• If cleaning is required, open the nozzle wide to flush debris out.

 Nozzles are also adjustable for different sprays from a spray to powerful straight line for long distance.

Available in three different sizes suited for your needs.

Jet can be closed down to zero flow.

Feature: These nozzles are designed in such a way for easy use and provide maximum spray or pressure for distance. Easily cleaned of any blockage when opened to the large spray. Built to last!

Advantage: The easy cleaning design allows for fast and effective fire fighting. Produces very compact jet flow for long distance.

Benefit: The nozzles are small and easily attached. When using the smallest nozzle you wont use **excessive** water (0-50lites/min at 6bar).

The nozzles are durable, light-weight and suitable for your fire fighting needs.



Test Pressure	Nozzle	Equivalent to nozzle size	Liters/ minute
6 bar	1/2 inch	5.5mm	0-50 liters
6 bar	¾ inch	7.0mm	0-75 liters
6 bar	1 inch with 3/4 hose	8.00mm	0-117 liters
6 bar	1 inch with 40mm hose	9.00	0-130 liters

Hydraulics Brake Valves





For road safety and the protection of your investment, our one of a kind hydraulic tractor trailer brake valve system has been used by farmers locally and internationally since 1975. The brake valve components are manufactured with the help of CNC equipment and carefully hand assembled. We can supply installation kits for most tractor models on the market in Southern Africa. Typically the kits are installed at tractor dealership level. We also stock general hydraulic hard ware and spares. We supply hose assemblies, automotive brake hoses included.

RAILER BRAKE VALVE FOR ALL TRACTORSSABS 1447 REQUIREMENT:

PROGRESSIVE CONTROL (GRADUATED BRAKING) WITHOUT TAKING HANDS OFF THE STEERING WHEEL!

Saves trailer brakes and tyres because it works progressively. Gives priority to trailer brakes to protect tractor brakes from "over use". Trailer brakes should always be well maintained to ensure efficiency. Modulating brake valve provides full progressive control and works in tandem with tractor brakes but independently. Single wheel brakes of tractor can be operated without the trailer braking at the same time. Operates with any number of brake cylinders. Easy installation and integration into the hydraulic system of tractor. Maximum trailer brake pressure limit adjustable externally. Operating pressure range between 0 and 10.1 Mpa

Demo Videos

Single Stage

mttps://www.youtube.com/watch?v=UzsxcRl56nU

<u>www.youtube.com/watch?v=K-lcvILPVxU</u>

Rovatti Multi Stage

owww.youtube.com/watch?v=Dz9RZ4kcc7w

BB Cast Iron with Demo Bakkie www.youtube.com/watch?v=fLfny4mCn28

Nozzles:

owww.youtube.com/watch?v=VQbMh1gFcol



KMHydraulics

- We do make two new hydraulic drive pumps on request
- Ceramic Carbon Chemical pumps
- Hydraulic drive Sludge Pumps.



