

WATER BOOSTER SETS

All our custom built water booster sets can be tailored to your individual system needs upon receipt of your enquiry.

Our standard booster sets generally come in one, two, or three pump versions depending on your system requirements although we can accommodate any number and sequence of pumps. All booster sets operate in the same general configuration.

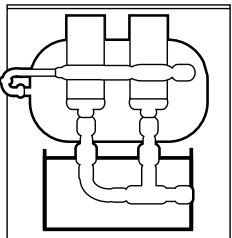
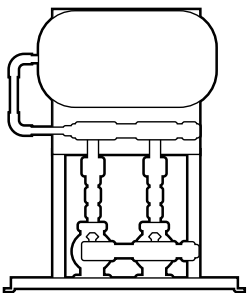
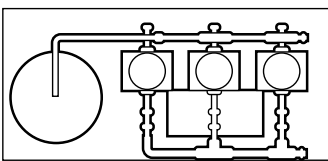
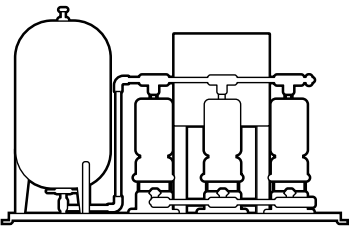
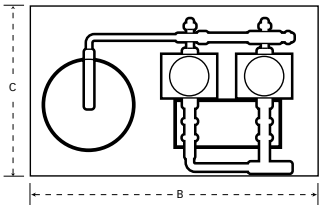
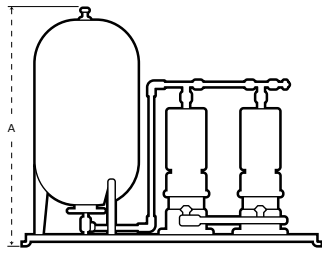


Operation

As system water is drawn off, the pressure within the hydro - pneumatic accumulator will decrease. This accumulator contains a small amount of pressurised water to meet limited demand from the system. Should the demand continue the pressure within the accumulator will decrease until such time as the pre-set cut in point is reached when the lead pump will be automatically started. This pump will continue to operate until such time as the system demand has ceased

and pressure within the hydro - pneumatic accumulator has been re - established when, the pressure switch will operate the pump run on timer. This method of control will exclude pump hunting and the need for large vessels. (However it should be noted that during pump run on the system will reach the pump closed valve head pressure). This can be avoided by the introduction of a pressure reducing valve.

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TWO PUMP SETS

Two pump sets can be sized as 100% duty and 100% standby or Lead / Lag mode with the total set duty split equally between the two pumps i.e. 50% each.

THREE PUMP SETS

Three pump sets are sized on 50% of the total set duty per pump with any two from three selected as the duty pair operating in a cascade format. Percentage flow rates can be varied to suit customer requirements.

MULTIPLE PUMP SETS

Any number of pumps can be accommodated and controlled as required upon receipt of your parameters.

JOCKEY PUMP

All of the above sets can be designed and built to accommodate a jockey pump, normally capable of 10 or 15% of the set duty. The use of a jockey pump helps to reduce running costs by preventing the need to run the main pumps during periods of low demand.

OPERATION - VARIABLE SPEED SETS

A request for water generates a pressure drop in the system; the first pump starts and if its capacity is sufficient to compensate the request, it keeps the pressure at the set value. Otherwise, when the first pump reaches maximum speed (50 Hz), the second pump starts to assist the first. When the request for water terminates, the system stops.

- **Simple protection panel** (the control takes place inside the converters)
- **In the event of a fault** in one of the two pumps or converters, **the water supply is guaranteed** because the system does not stop completely as the main pump can continue to deliver water.
- **Cyclical changeover** of pumps at every request of water
- **Reduced space**

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