

HYDRO BOOSTER UNITS

Wide range of 1, 2, 3 or 4 pump units controlled by pressure switches or pressure transmitter, with constant or variable speed electric pumps, timed or to be coupled to surge tanks of suitable volume.

Applications

- Water supply to domestic dwelling and office buildings, hotels, shopping centers, factories, and greenhouses.
- Water supply for agricultural use (irrigation systems).
- Water supply to systems requiring steady pressure (version with variable speed pumps).

Introduction

Lowara Hydro booster sets have been designed to be both compact and cost effective. For fixed speed applications we have the Hydrofix range and for variable speed applications we have Hydrovar range.

All Hydro sets are built to exacting standards and as such are suitable for the harshest environments. Packaged Hydro sets are suitable to cover all building service applications from small domestic premises to large building complexes as well as Irrigation.



Operating characteristics

Reliable controls

The control system in any booster set must be robust. The environment in which they operate can often be subject to power fluctuations, induced spikes, RFI and EMI Both the Hydrofix and Hydrovar uses proven electronics to ensure immunity from all conditions normally encountered in their operating environment and will also ensure long periods of operation with minimal down time.

This product has been fully tested and complies with the latest EC directives for EMC emissions and immunity, and the low voltage and machinery directives.

Pump configuration

The Hydro sets can be supplied in many configurations. Single pump, full duty operation.
Two pumps arranged as duty assist or duty standby.
Three pumps arranged as duty-assist-assist or standby.
Four pumps arranged as duty-assist-assist-assist or standby.

Installation and service

Each set comes fully packaged complete with isolating valves, non return valves, pressures sensors and fully supported suction and discharge manifolds.

Small sets are provided with screwed manifolds whilst all other sets are provided with flanged manifolds.

Pressure vessels are normally supplied separate from the base to keep the pump set size to a minimum for ease of manoeuvrability, however vessels can be integrated into the pump set when required.
All pumps can easily be removed for servicing.

Pumps

Lowara have been manufacturing a large range of high quality end suction and vertical multistage pumps for many years. Booster set manufacturers have been quick to see the benefits of this range and many have incorporated them into their own booster set designs.

The Lowara range of Hydro booster set have been designed and built to the same exacting standards as the pump range, this combination of building both pump and set results in an extremely reliable and cost effective solution to cold water boosting

Booster set selection

In the majority of applications the booster set must be capable of providing the maximum probable simultaneous demand. As this demand is not normally continuous, the duty can be shared between several pumps.

Where the flow rate is relatively small a two pump set can have each pump sized to cater for 100% of the duty, one pump acting as duty and one pump acting as standby.

As an alternative arrangement each pump can be sized to 60% of maximum demand.

One pump acting as duty which will operate most of the time.

The second pump will operate to assist the duty pump in peak demand periods, giving more than adequate support.

On systems with higher flow rates it may be more economical to split the duty between three pumps. Each pump can be sized to 50% of maximum demand.

Special requirements

All Hydro booster sets can be easily adapted to meet most customer specific requirements.

If you have a special requirement please contact our head office who will be pleased to offer technical advice and design a system tailored to your specific requirement.