

ARMSTRONG



Multipump Fixed Speed Booster Sets

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Armstrong offers fixed speed boosters with PLC control & monitoring



Armstrong offers a high value solution to address increased variations in flow, taller buildings and condensed living.

The need for booster sets has been on the increase for a number of years in India.

The reasons for this include:

- Storage of water in large sump tanks.
- The trend toward reduced urban sprawl has increased the demand for taller residential buildings.
- Upper floors of high-rise, multi-use buildings are more commonly being used for residential space.

Customer benefits

- Constant water pressures across all usage points
- Elimination/downsizing of overhead tanks leads to:
 - Reduced space requirements
 - Reduced construction cost
 - Reduced weight on building structure
- Variable flow demands are met
- Optimized water usage
- Reduced pressure fluctuation
- Reduced life cycle costs
- Lower maintenance costs
- Reduced noise levels
- Installation savings – pre-assembled and tested for quick, trouble-free installation
- Single source of supply
- Customized pipe connection options available
- Can be configured for operation of all pumps or allocation of one pump to standby
- Automatic omission of failed pump
- Automatic rotation of duty pumps for even wear on all pumps
- Reduced wear due to 'minimum run' controls
- Reduced footprint
- Install through standard doorways
- Adjustable operating mode (optional standby)

Applications

Applications for 6800 HMP series include:

- Residential and commercial buildings
- Schools
- Hotels
- Hospitals
- Industrial buildings
- IT parks

The 6800 HMP series range of packaged water booster sets are designed to provide a fully-packaged, compact and high-quality solution to your water problems.

High Efficiency

6800 HMP series range features

The 6800 HMP series booster sets incorporate 2, 3, 4, or 5 pumps mounted on a galvanized iron/ss 304 base-frame complete with galvanized iron/ss 304/ss 316 headers. Flow rates up to 50 L/s, pressures up to 25 bar as standard. The unit features BMS connectivity with remote start/stop, system running and booster alarm outputs.

- Each set factory tested
 - Hydraulic testing - Performs to customers duty requirements
 - Functional testing - Controller adjustment and system cycling to customers requirements
 - Electrical testing - Wired to BS standard, ensures no faults between controller and pumps
- CE marked
- EMC compliant
- Complies with LV directive
- All control components CE marked
- PLC controlled with LCD display

Hydraulic accumulators for energy recovery

- A comprehensive range of larger accumulators is available and can be supplied to increase rest time between pumping cycles. This configuration increases operating efficiency and reduces operating cost.
- Booster sets with minimum run timers allow for safe reliable operation but typically waste energy when the pumps run against closed valve head towards the end of the operating cycle. This energy can be recovered if all the boosted water is stored in the accumulator. An additional benefit when using a larger accumulator is that the pressure fluctuation to the closed valve head is minimised.

EFF motor labelling scheme

- 6800 HMP series booster sets are fitted with EFF2 motors to provide an economical high-efficiency booster solution.
- EFF1 motors offer the highest efficiency and power factor and are available as an option on all pump sizes.

LCD status indication

The 6800 HMP series booster set features a logic control unit to provide system status information and to stage pumps in and out as required.

LCD indications include:

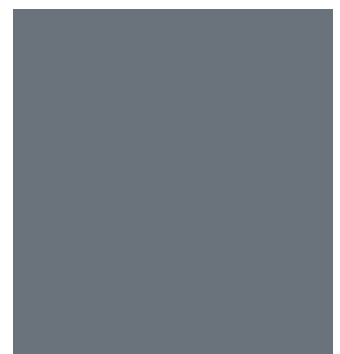
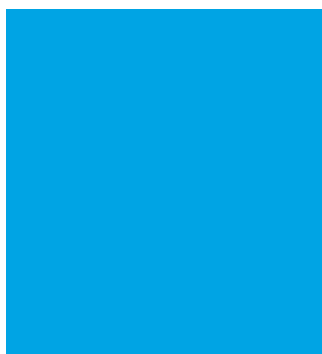
- Individual pump status
- Power on
- Storage tank low water level
- Pump hours run
- Low pressure alarm

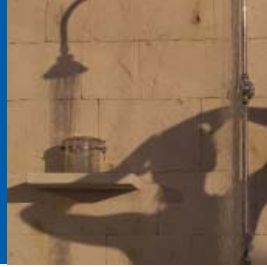
Remote stop/inhibit

This feature is provided as a means for the BMS to remotely disable the set via a switch.

Low water level device

Each booster set has dual break tank protection as standard within the control software. This ensures that the set does not run dry.





Typical specifications

The 6800 HMP series booster sets are packaged and tested prior to despatch and include the following components and features:

- Ball-type isolating valves
- Poppet-type non-return valves
- Galvanized iron/ss304 base frame
- Galvanized iron/ss304 /ss316 manifold
- 0-25 bar pressure transducer
- 2½" dial pressure gauge
- Stainless steel impellers, shaft, stage pieces
- Cast Iron - top and bottom covers
- Automatic rotation of duty pumps
 - Following any fault
 - On a time adjusted basis
 - At the start of a new sequence/power resuming
- Automatic omission of failed pump from sequence
- Automatic omission of pumps in the off position
- Automatic reset of pump from a 'minor' alarm situation
- Pump fault output
- IP54 Control Panel enclosure
- Door interlocked isolator
- LCD display with 4 x 20 text display of:
 - Setup menus
 - System pressure
 - Pump operating status
 - System alarms
- Low water level cut-out
- Remote inhibit function
- Password protected menu screens
- Standby pump selection
- Common alarm volt-free contact
- Booster running volt-free contact
- No flow shutdown
- Transducer failure protection
- Alarm management displays:
 - Low level shutdown alarm
 - Discharge pressure sensor failure alarm
 - Suction pressure sensor failure alarm
 - Low suction pressure shutdown alarm
 - High suction pressure shutdown alarm
 - Low discharge pressure shutdown alarm
 - High discharge pressure shutdown alarm

Other product specifications available on request or from www.armstrongintegrated.com

Our policy is one of continuous improvement. We reserve the right to alter our dimensions and specifications without notice.

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