

e-Boost™

Grundfos Booster System

The Global Water Grundfos e-Boost Pressure Booster range is the state-of-the-art fully integrated booster system providing ultimate performance and reliability. Fully automatic, the modular design allows the flexibility of adding additional modules as required.

Giving instant pressurised discharge from shut-off through to maximum rated capacity, the integrated process controllers monitor demand and seamlessly pace system output, adjusting pump speed and varying the number of duty pumps to ensure consistent constant pressure.

Integrated pump-mounted control logic ensures running hours are evenly distributed across the whole system, and inbuilt system monitoring and feed-back loop ensures maximum reliability and efficiency.

FEATURES

- Inbuilt pump-mounted control featuring variable frequency drives for each pump.
- Inbuilt system and pump protection and diagnostics, including recording running hours and login and system alarms.
- Integrated shaft start and soft stop functions, extending the life of the system and reducing peak absorption.
- BMS alarm outputs for over-current, no load, dry run, pressure sensing.
- RS485 communication protocol, no flow and thermal alarm (all on request).
- User friendly interface for simple set-up and monitoring.
- Individual variable frequency drives to maximise reliability.
- Stainless steel pipework for maximum corrosion resistance.
- Fully assembled and pre-tested for simple installation.
- Low-level float for dry run protection.

APPLICATIONS

Water supply and pressure boosting

Multi-story buildings, hotels, and residential housing estates, rainwater reuse reticulation, municipal water supply networks, and pressure boosting for industrial complexes.

Industry

Washing and cleaning systems, car washing facilities, process water systems, machine cooling circuits.

Heating, ventilation and air-conditioning

Boilers, induction heating, heat exchangers, refrigeration, cooling towers and systems, and humidity control systems.

Irrigation and agriculture

Greenhouses, sprinkler irrigation, flood irrigation.

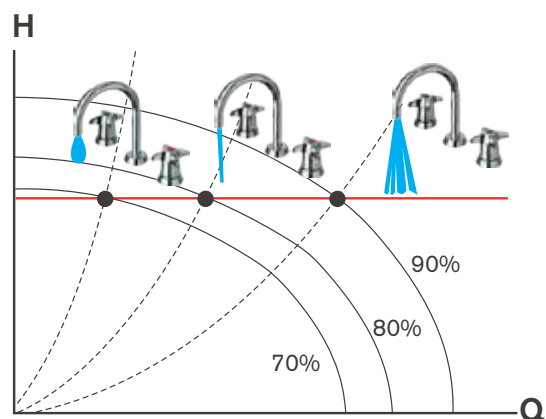
Water treatment

Water softeners and demineralisation, reverse osmosis systems, treated water reuse, and filtration and ultra-filtration systems.

AVAILABLE OPTIONS

- Up to four pumps per system.
- RainAce™ changeover system.
- Systems in all 316 stainless steel construction.
- Flange connections.
- Vibration dampners.
- Filtration.
- Hydrostatic transducer for tank level monitoring and dry-run protection.

VARIABLE SPEED FUNCTION



e-Boost™

Grundfos Booster System

PUMPS

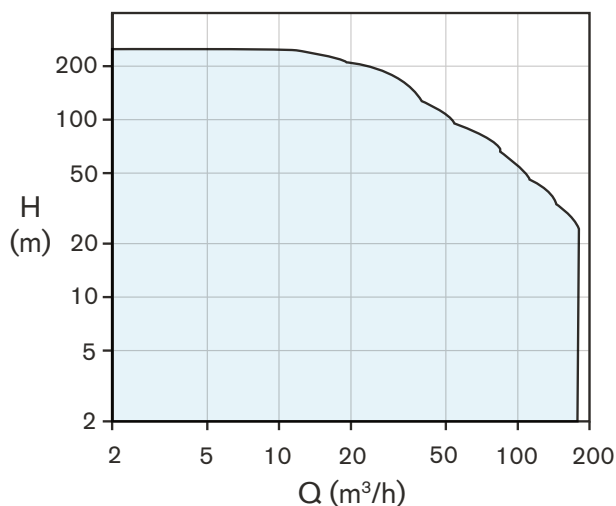
Grundfos multi-stage pumps are non-self priming vertical multistage pumps of in-line design fitted with pump-mounted variable speed controllers. Multi-stage construction with 304 stainless steel impellers, chambers and pressure casing, and cast iron pump head and base.

Units can be supplied in all 304 or 316 stainless steel construction for superior corrosion resistance if required. Pump stub shaft and motor shaft of the IEC-standard motor are directly close coupled. All pumps are equipped with a cartridge type mechanical seal for easy maintenance.

ELECTRIC MOTORS

- Squirrel cage, aluminium or cast iron frame up to 22 kW, totally enclosed, fan-cooled, 2 pole standard or high efficiency motor.
- Enclosure class: IP55.
- Insulation class: F.
- Standard voltages: 0.37-1.5 kW; 220-240 V or 380-415 V. 2.2 kW–22kW; 380-415 V
- Motor efficiency values fall within the range referred to as IE5.
- Ambient temperature: Max. +50 °C.

PERFORMANCE SCOPE



COMPONENTS

1. Circuit breaker.
2. Grundfos vertical multi-stage pumps with integrated pump-mounted VSD.
3. Type-certified pressure vessel.
4. 316 stainless steel manifold.
5. Bronze ball and check valves.
6. Stainless steel base.



