



# Pressure booster sets for residential and commercial buildings

A COMPLETE RANGE OF SOLUTIONS FOR IMPROVED SYSTEM PERFORMANCE

# Residential Single Pump

## Sphere units, Block units

Small built-in, fully automatic pressure boosters consisting of a single phase pump, diaphragm tank, pressure switch, pressure gauge and various connectors suitable for potable water systems. The units are fully assembled and ready to be connected to the building's water system or pump water directly from a well.

Applications:

- Pressure boosting in water systems for domestic use, lawn sprinkling and washing
- Pumping of non-aggressive liquids in industrial plants



**SPHERE UNIT**

## BLOCK UNIT



## Genyosystem

Range of packages composed of a pump equipped with Genyo, a compact electronic device, pressure/flow switch for control and protection. Genyo enables automatic control of pump start-up and shutdown based on actual water demand, preventing any pressure fluctuations at delivery points with a constant operating point. Genyo integrates multiple system controls into a single device.

Applications:

- Domestic pressure boosting (single and multi-family dwellings)
- Small irrigation and gardening
- Bathing establishments, campgrounds, sporting facilities



## Specifications (Sphere units)

Delivery: up to 480 l/min (28.8 m<sup>3</sup>/h)  
Head: up to 77 m (7.6 bar)  
Power supply: single-phase 50 and 60 Hz  
Power: up to 1.5 kW  
Water temperature: 0°C to +40°C

## Specifications (Block units)

Delivery: up to 300 l/min (18 m<sup>3</sup>/h)  
Head: up to 35 m (3.4 bar)  
Power supply: single-phase 50 and 60 Hz  
Power: up to 1.5 kW.  
Water temperature: 0°C to +40°C  
Tank: 24l horizontal cylindrical

# p Booster Sets

## ResiBoost units

Range of packages composed of a pump equipped with ResiBoost, a variable frequency drive for constant pressure systems. ResiBoost automatically controls the speed of the pump while keeping the pressure in the system constant.

The ResiBoost is specially designed for maintaining constant pressure independent of flow for maximum comfort. Precise speed control results in significant energy savings. Top quality components guarantee high reliability and a troublefree life. The inverter has inbuilt protection against various system and electrical faults. Smooth operation and soft starting ensure silent running and an extended pump life. With easy-to-install pipe or wall mounted versions available, set up is simple and quick.

ResiBoost is available with:

- VM: close coupled, vertical multistage pumps
- e-HM™: highly efficient, horizontal multistage pump with best in class efficiency and IE3 motors fitted as standard.
- BG: Close-coupled, self-priming centrifugal pumps with built-in ejector system, designed to remain primed even in the presence of water-dissolved gases.



## Specifications (Genyosystem)

Delivery: up to 120 l/min (7.2 m<sup>3</sup>/h)  
Head: up to 53 m (5.2 bar)  
Power supply: single-phase 50 and 60 Hz  
Power: up to 1.1 kW  
Water temperature: 0°C to +40°C

## Specifications (ResiBoost units)

Flow up to: 7.2 m<sup>3</sup>/h (water cooled), 14 m<sup>3</sup>/h (air cooled)  
Head up to: 70 m (water cooled), 96 m (air cooled)  
Power supply: 50 Hz

# Residential Booster Sets

## GXS20, GMD20 Booster Sets

Extensive range of 2 pump sets controlled by pressure transducers or pressure switches, with constant speed operation.

The range has been designed for residential water supply.

The GXS20 and GMD20 booster sets are available with BG, CEA, e-HM and e-SV series pumps.

The GXS20 and GMD20 booster sets with e-HM and e-SV series pumps are certified for use with drinking water according to WRAS, ACS and D.M. 174.

**GXS**



**GMD**



## Specifications

Delivery: up to 62 m<sup>3</sup>/h

Head: up to 160 m

Power: up to 4 kW

Maximum operating pressure: 16 bar

## SMB Variable Speed Smart Booster Set

The SMB series variable speed booster sets are designed for water pressure boosting and transfer. They use the latest technology to easily deliver water at the correct pressure and flow for residential and light commercial applications such as:

- Apartments, single- and multi-family houses, condominiums, residential buildings
- Hotels, restaurants, spas
- Industrial applications and others

The SMB series booster sets are equipped with Smart pumps to save money and reduce lifecycle costs, featuring:

- Ultra-premium IE5 permanent magnet motors for best-in-class efficiency
- Power drive system (drive and motor) in the highest efficiency class, IES2
- Hydraulic pump designed for exceptional Minimum Efficiency Index (MEI) ratings



SMB booster sets are available with two and three pumps:

- e-HME series: horizontal multistage, stainless steel pumps
- e-SVE series: vertical multistage, stainless steel pumps
- VME series: vertical multistage, close-coupled pumps

Benefits:

- Compact design. SMB is also available with e-SVE..R pumps to fit installations where limited footprint is a must
- Money saving and lifecycle costs reduction thanks to IES2 and the highest hydraulics efficiency
- SMB booster sets with 2 and 3 pumps are certified for drinking water use (WRAS, ACS and D.M.174)
- SMB booster sets are easy to commission and operate, thanks to a friendly interface with preset parameters
- Communication via Modbus and BACnet is possible
- Quiet performance
- Reliability

**SMB**



## Specifications

Delivery: up to 90 m<sup>3</sup>/h  
 Head: up to 150 m  
 Liquid temperature: up to 80°C  
 Power: up to 1.5 kW per pump

# Commercial Booster S

## GHV variable speed booster sets

The GHV series booster sets are fully automatic booster sets for water supply, water pressure increase and water transfer in condominiums, office buildings, hotels, public buildings, industries and other applications.

The GHV series is equipped with 2-4 variable speed pumps, each one fitted with a Hydrovar HVL variable frequency drive, pressure transmitters and control panel, all mounted on a frame for easy installation. The GHV series is easy to program, designed for maximum energy efficiency and can communicate with a BMS system via Modbus or BACnet.

The GHV series can be fitted with e-SV vertical multistage pumps.

The GHV series is certified by WRAS, ACS and D.M. 174 for use with potable water.

Special sets with up to 8 pumps and other versions are available on request.

Applications:

- Hospitals
- Schools
- Public buildings
- Industries
- Hotels
- Condominiums
- Sports facilities
- Mains water systems



## Specifications

Delivery: up to 640 m<sup>3</sup>/h

Head: up to 160 m

Power: up to 22 kW

Maximum operating pressure: 16 bar

## GS fixed speed booster sets

The GS series booster sets are fully automatic booster sets for water supply. They are equipped with 2-3 fixed speed pumps (where one can be a jockey pump), control panel, SM30 controller and pressure transmitters, all mounted on a frame for easy installation. The SM30 is easy to set and can be connected to a BMS system via Modbus.

The GS series booster sets can be fitted with vertical e-SV multistage pumps.

The GS series booster sets are certified for use with drinking water according to WRAS, ACS and D.M. 174.

Applications:

- Water network supply in housing complexes, offices, hotels, shopping centres, industrial plants.
- Supply of water networks for agricultural applications (e.g. irrigation)



## Specifications

Delivery: up to 630 m<sup>3</sup>/h

Head: up to 160 m

Power: up to 55 kW

Maximum operating pressure: 16 bar

# Monitoring & Controls

## Smart Pump Range (e-SM drive)

Xylem Lowara's most energy-efficient permanent magnet motor with integrated variable speed drive taking motor efficiency to a new level.

- Power up to 1.5 kW
- Can link up to 3 pumps
- Can be coupled with most Lowara pump units
- Reduced energy / CO<sub>2</sub> / life cycle / running costs
- Easy to commission
- Less wear and less mechanical stress to the pump unit
- Works with your system to make it efficient
- BACnet and Modbus as standard (card required for multi-pump)
- Compact design
- Single phase input
- Sensorless version for e-LNE pump
- IES2 compliant when fitted with IE5 Lowara Motor



## Hydrovar variable speed drives

Hydrovar is the intelligent pump controller that matches the performance to the demand. The system consists of a variable speed drive (VSD), a control card, sensors, EMC filters and motor/system protection.

There's no need for an external control panel when using Hydrovar.

The Hydrovar is easily mounted directly on the motor of the pump and will fit on any standard IEC motor. This makes the Hydrovar an excellent choice for retrofitting and upgrading of fixed speed systems.

### Control offering.

- Multi-pump capability from 1 to 8 pumps
- Constant pressure
- Constant flow
- According to system curve
- Via an 4-20 mA or 0-10 V external signal

### Specifications.

- Power: from 1,5 kW to 22 kW
- Power supply: single or three phase 50 or 60 Hz
- Communication: RS485 interface, BACnet, Modbus, Wi-Fi card (optional)





# Fire-fighting Booster Sets

## Booster sets for fire protection according to EN 12845

In automatic sprinkler systems, trustworthy products are a must.

Designed and tested to meet a building's most demanding requirements, GEM firefighting booster sets deliver water when needed.

The broad GEM range is built up of modules that can be tailored to any specific requirement, and assembled into a set compliant with the EN 12845 standard for automatic sprinkler systems.

The modular design of the booster not only offers great flexibility, but also makes installation and service easy.

The standard modules are fitted with high quality e-NSC end suction pumps with either electric motor or diesel engine.

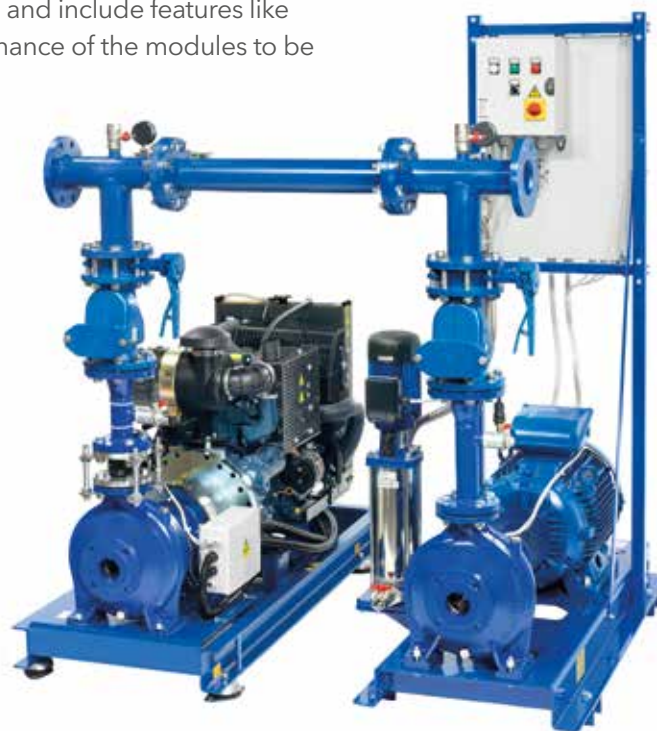
The sets can be assembled with or without jockey pump, and include features like periodic selftest and automatic shut off, allowing maintenance of the modules to be performed without the need to fully shut down the system.

The GEM series modular fire-fighting booster sets are available in different configurations:

- horizontal end suction electric pump, complete with electric panel
- horizontal end suction electric pump with jockey electric pump mounted on the frame, complete with electric panels
- diesel engine driven horizontal end suction pump, complete with electric panel and fuel tank

A range of accessories is available, such as a flow meters, jockey pump dry run protections, reduction suction tapers and alarm panels.

Modules with other pump types and in different configurations are also available on request.



## Specifications

Flow: up to 766 m<sup>3</sup>/h

Head: up to 146 m

Maximum power output: 200 kW

Maximum operating pressure: 16 bar

# You Can Trust Us

Xylem products and solutions are installed all over the world and probably close to you. We've been chosen because we are able to understand and meet the demands from a modern society focusing on cost efficiency and reliability.

Our products support comfort and safety in people's lives, whether they are at home, at work, watching a sports game or staying in 5 star hotels and spas.

## Vienna hospital, Vienna, Austria.

**Vienna hospital was inaugurated in 2004. Xylem products distribute water and keep the temperature at a perfect level throughout the largest hospital in Europe.**

Close to 300 in-line and end suction pumps and booster sets are installed here.



## Hospital Beatriz Ângelo, Lisbon, Portugal.

**Since 2012 this has been a fully Xylem equipped hospital.**

Heating and cooling: 125 Lowara FC, e-SV and FH pumps, 92 of them with Hydrovar.

Water supply and irrigation: 3 GHV booster sets. Wastewater: 3 Flygt N3127.

Firefighting: 1 Lowara booster set.



## Scarlet Sails apartment complex, Moscow, Russia.

**In 2012 Block V in one of the tallest residential building complexes in Moscow was inaugurated. Lowara pumps makes taking a shower a pleasure on all floors.**

Heating and cooling: 8 FC with Hydrovar.

Water supply: 7 e-SV booster sets with Hydrovars.



## Ashgabat 2017 games, Turkmenistan.

**Ashgabat in Turkmenistan is set to be the home of the fifth Asian Indoor and Martial Arts games in 2017.**

Totaling over 1,466 square meters, the multi-purpose sports facility, comprising 30 venues. The Xylem team specified more than 1,000 pumps for water and wastewater handling for phase one and two of this project.



These case studies are just a few examples, find more at [xylem.com](http://xylem.com)

### Palazzo della Regione Lombardia, Milan, Italy.

**The 160m high building relies on Lowara pumps for fresh water and a comfortable indoor climate.**

Heating and cooling: FC pumps with Hydrovar. Water Supply: GHV booster sets and FH pumps.



### Hermes Park Carrefour, Sofia, Bulgaria.

**In 2010 Xylem equipped the 170.000 m<sup>2</sup> shopping mall, the biggest in the Balkans, with a complete pumping solution.**

Heating and cooling: 185 FH, FC and LS pumps, 85% equipped with Hydrovar. Water supply: 2 GHV booster sets and 10 in-line and end suction pumps. Wastewater: 27 lifting stations. Firefighting: 7 GEN booster sets.



### Burj Khalifa, Dubai, UAE.

**The Burj Khalifa opened in 2010.**

**Xylem's custom-designed variable speed booster sets distribute 1000 m<sup>3</sup> of water every day all the way up to the top floor of the 830 m building.**

Water supply: 6 water transfer sets and 7 pressure booster sets.

# Xylem ['zīləm]

- 1) The tissue in plants that brings water upward from the roots
- 2) A leading global water technology company

We're 12,000 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

For more information on how Xylem can help you, go to [xylem.com](http://xylem.com)

## Free Line group

We offer:

- Engineering and technical solutions of Xylem for water supply, wastewater and water purification systems, which are leading in the world.
- A full range of pumps and equipment for such applications as supplying drinking or untreated water, diversion of industrial wastewater, sewage, drainage, monitoring installations and operation, primary and secondary biological treatment, filtration and disinfection.
- Technical support and maintenance of pumps. Our local service center provides comprehensive services and support for safe, efficient and reliable operation. You can rely on us to ensure trouble-free operation and minimal downtime. We will quickly respond and give a professional answer to your questions, as well as provide high-quality service using original spare parts.

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