



Engineering Flow Solutions

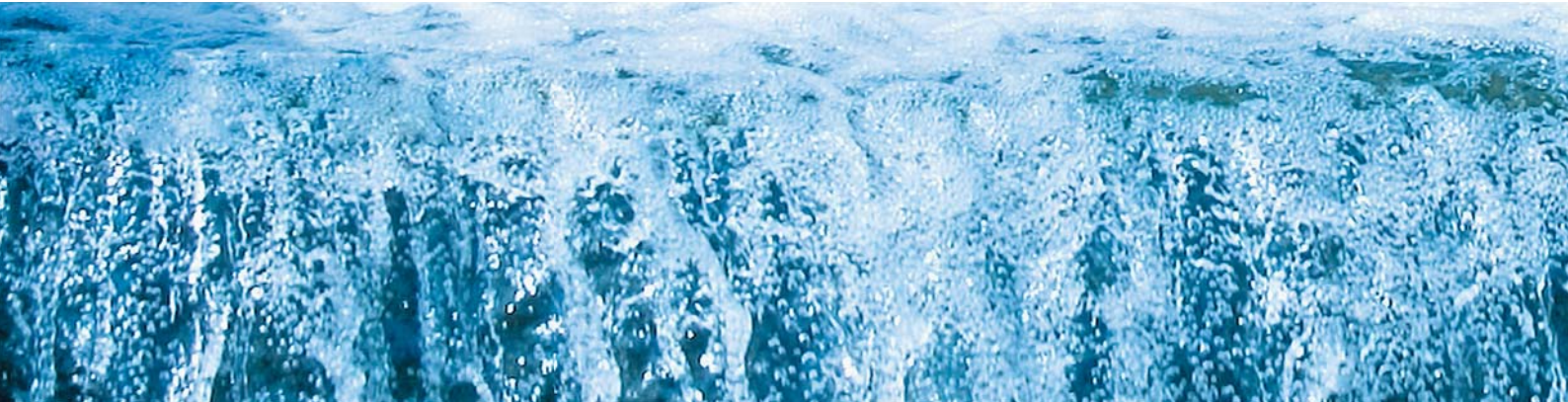
AUTOMATED PRESSURE BOOSTING SYSTEMS

APD



Automated Pressure Boosting Systems

APD



DESCRIPTION

Automated pressure boosting systems of the APD series are intended for handling clean water and other liquids, similar in physical properties (specific gravity, viscosity, density) and corrosion impact on the pump parts material.

The pressure boosting system includes from 1 to 6 vertical centrifugal multistage pumps mounted on a common base frame, suction and pressure manifolds, pumps control and protection panel with a set of sensors as well as shut-off and control valves.

The APD series systems are applied for automatic increase and maintenance of required pressure value in the drinking and process water supply systems at industrial facilities and residential areas.

The systems of the APD series are produced by one of the leading Russian pump manufacturing companies – HMS Livgidromash (a part of HMS Group).

APPLICATION

- Hot and cold water supply systems at industrial facilities, residential areas, and agriculture
- Central heating, ventilation and air conditioning (HVAC) systems in residential, administrative and industrial buildings
- Automated fire extinguishing systems
- Process water supply and irrigation systems in agriculture applications

TECHNICAL DATA

Capacity range	up to 160 m ³ /h
Pressure head range	30 – 270 m
Fluid temperature	+5 ... +70 °C
Single pump power range	0,37 – 18.5 kW

MATERIALS

Pump Casing	Suction & Discharge Nozzles	Impeller	Mechanical Seal
Nickel Chromium Steel	Cataphoretic Cast Iron / Nickel Chromium Steel	Nickel Chromium Steel	Siliconized Graphite

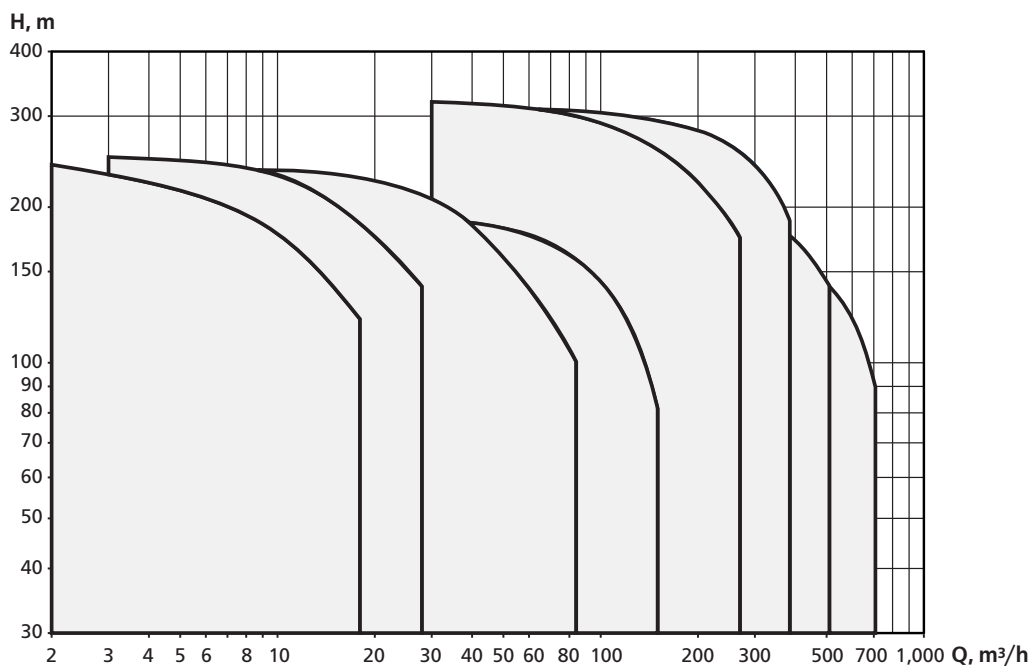
Automated Pressure Boosting Systems APD



ADVANTAGES

- Reduced energy consumption of pumps due to optimal operation mode with maximum efficiency using various regulation methods:
 - **cascade regulation:** switching on/off required number of pumps;
 - **frequency regulation:** changing the pump rotation speed;
 - **combined regulation:** combination of cascade and frequency methods.
- Increased pump lifetime due to VFD application and integrated motor protection.
- Various pump regulation methods depending on the water supply system requirements, including proportional pressure control or maintaining its constant value.
- Reduced the number of accidents and water hammer in pipelines due to the pumps smooth performance regulation.
- Reduced power losses of the pumping station due to the pump performance regulation without using the valves at discharge pipelines.

PERFORMANCE RANGE



**HMS Group Moscow
International Sales Department**

Phone: + 7 (495) 730 6601

E-mail: export@hms.ru

www.grouphms.com

www.hms.biz



**The manufacturer of the APD boosting systems
is HMS Livgidromash (HMS Group)**

The information contained in this booklet is intended for reference purposes only and basic selection of products manufactured by HMS Group and its affiliated companies.

Full and detailed technical information regarding specifics products of HMS Group or its affiliated companies is available in relevant manufacturer's technical manuals. HMS Group reserves the right to alter the products without prior notice and is not responsible for possible errors and misprints in catalogs, brochures and other printed or published materials in any form.