

# Packaged Pumping Systems

## HYDRO MPC HVAC

The Grundfos Hydro MPC HVAC is an integrated packaged pumping system that offers an easier, less costly and more efficient alternative to field-built systems in HVAC applications. Pre-piped, pre-wired and pre-tested, this system includes pumps, motors, controls, VFDs and more for easier installation and unrivaled performance.

Using intelligent controls and smaller pumps, the Hydro MPC HVAC harnesses the power of parallel pumping for greater flexibility, scalability and efficiency in ever-changing load conditions. This reduces energy consumption by more than 18% compared to other VFD HVAC systems, providing substantial cost savings in the long run.



### Key Features and Benefits

- **Modular design options** for cost-effective, perfect-fit, packaged solutions with a smaller footprint than traditional pumping systems
- **One housekeeping pad and no grouting**, for easier and more cost-effective installation; fits on existing housekeeping pads for retrofits.
- **No suction diffusers**, triple duty valves or alignment necessary.
- **Advanced permanent magnet motor**, available up to 15 HP, offers an additional 7–10% decrease in energy cost over NEMA Premium motors with conventional variable frequency drives.
- **CU 352 controller** runs up to 6 pumps by intelligently monitoring power, pressure and curve data, and with cascade control, activates only the pumps necessary to support load requirements.
- **Control HVAC (optional)** is a more robust controller designed specifically for HVAC applications and can control up to 26 zones and includes chiller bypass control.
- **Multizone control** regulates up to 6 HVAC zones within a defined differential-pressure band.
- **CIM/CIU interface** snaps in directly in to the CU 352 for easy BMS integration utilizing single poll functionally that pings device once for over 30 communication points of data and control.
- **SCADA communication capable** via field-bus and Ethernet protocols like Modbus, BACnet, Profibus or LON for back office control of your entire system.
- **Logging capability** records operational data such as system performance and energy consumption for trouble-shooting and energy analysis.
- **CR/CRE pumps**, at the heart of the Hydro MPC HVAC, are the world's number one vertical multistage centrifugal pumps, with space-saving in-line design and a registered fit.
- **Newly designed cartridge shaft seal** is available in a variety of materials and can be replaced in minutes for easier maintenance.
- **Stainless steel manifolds** are engineered to streamline flow, reduce pressure loss and protect against corrosion.
- **Built-in sensors** allow easy data collection, while optional additional sensors enable optimized HVAC zone control.

### APPLICATIONS

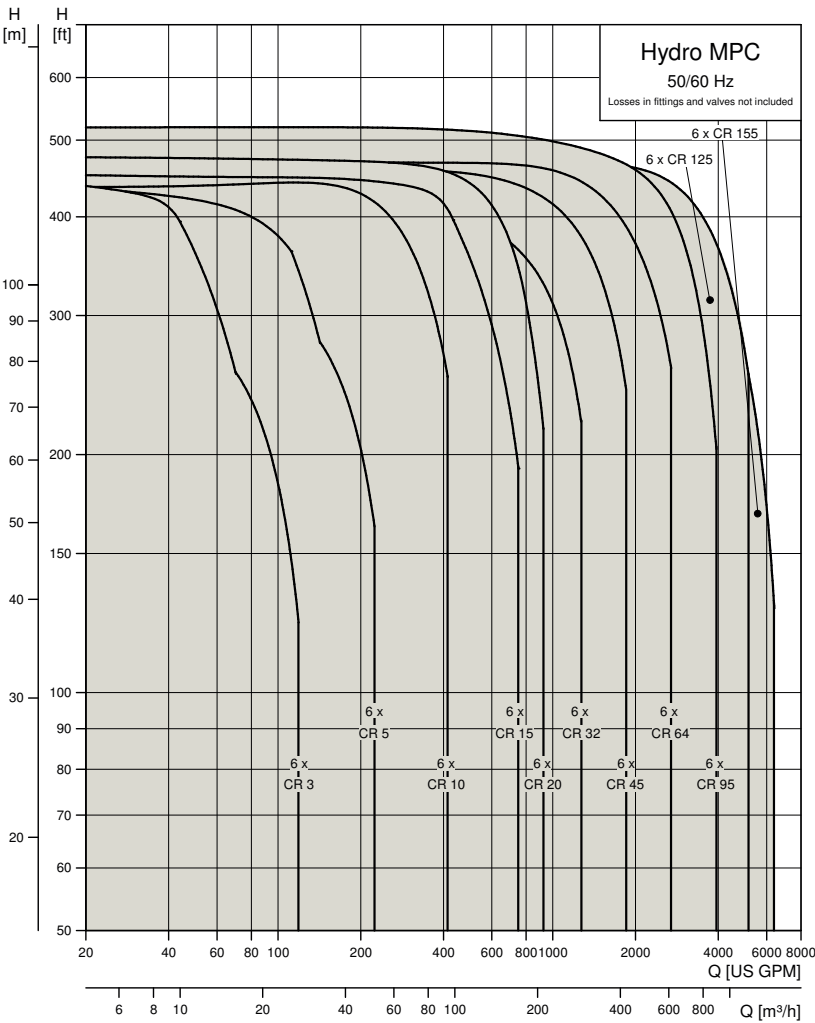
- Hydronic Heating and Cooling
  - Variable Primary
  - Primary/Secondary
  - Condenser Water
  - Distributed Pumping
  - District Energy Systems
- Industrial Process Temperature Control

HYDRO MPC **Technical Data**

HYDRO MPC INFORMATION

Flow, Q (2–6 pumps):	max. 6,000 gpm (1,363 m³/h)
Head, H:	max. 1,000 ft (305 m)
Working Pressure:	max. 400 psi (27.6 bar)
Liquid Temperature:	32 °F to 180 °F (0 °C to 82 °C)†
Approvals:	<ul style="list-style-type: none"><li>• System NSF 61/372 Approval</li><li>• OSHPD — Seismic Certification (OSP-0491-10)</li><li>• UL Listed Packaged Pumping System</li></ul>

† Higher temperatures available on request.



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