

# GRUNDFOS HYDRO MPC PUMPING SOLUTION



# Superior boosting with Grundfos Hydro MPC

- Handles difficult boosting jobs with ease and accuracy. Complete with standby pressure sensor.
- Advanced pump controller with a very user – friendly operator interface
- Intelligent user interface with backlight
- Outstanding reliability and stability
- High efficiency
- Total solution for pressure boosting
- Easy to install and easy to operate



## The complete solution

All components have been combined with focus on quality and efficiency. The Grundfos Hydro MPC booster systems are designed to last: sturdy, compact units with easy access to all service parts. Grundfos Hydro MPC booster systems can be used wherever additional pressure is needed. Each booster model has been designed to meet specific demands for capacity and control that a customer faces. The Grundfos Hydro MPC is suitable for any type of application where pressure control is applicable and water flow varies depending on the consumption such as:

- Water supply
- Building services
- Industries
- Irrigation
- Many more applications.



*The brain of The System offers a large graphic display and menu for easy navigation*

## Easy-to-operate user interface.

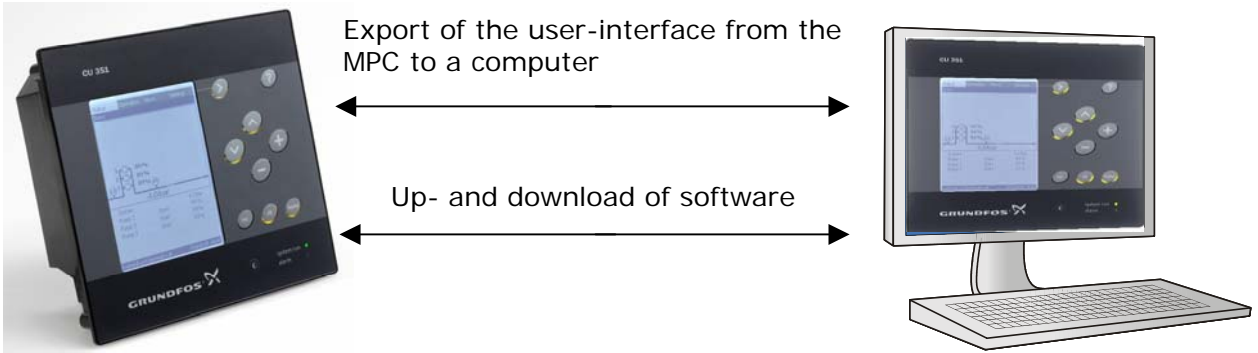
Grundfos has developed a user interface that offers a wide range of facilities while being intuitively simple to operate and very user friendly:

- Large graphic display with overview of the system including key measuring points
- Backlight display
- Menu bar for easy navigation
- System information and status
- Control functions
- Cascade control
- Alternation
- Speed control

## Log and statistics

In order to enable optimization of the booster system, it is important to ensure that valid operation data are obtained and continuously logged. The Grundfos MPC control offers easy access to a wide range of operating data and statistics, such as:

- System performance
- Energy consumption
- Alarm and warning log



## Data communication - Ethernet

➤ Ethernet is a networking standard coming from the information technologies. It is also the most popular and most widely deployed network technology in the world.

➤ Ethernet devices could previously only have a few hundred meters of cable, but modern advancements have increased this distance.

➤ Since Ethernet is widely used for Local Area Networks (LAN), the MPC controller can be connected to a computer via an Ethernet connection, which allows the Hydro MPC to be monitored and controlled externally within the LAN.

(For more information, please contact Grundfos.)



## Customize Solution Upon Request

### ➤ Panel

- Splash proof
- Evolving Light
- Indication light – Run/trip
- BMS

### ➤ Piping

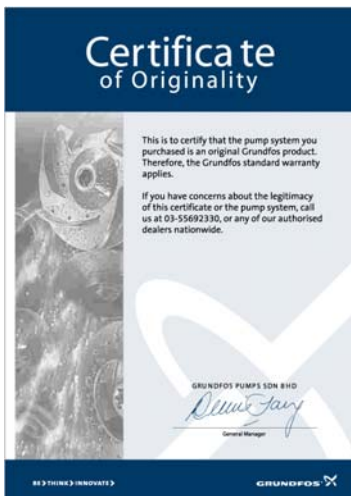
- Stainless steel 304 manifold
- ABS

### ➤ Accessory

- Stainless Steel Tank

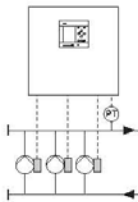
**\* Please contact Grundfos for other specific request.**

## Please insist on the Certificate of Originality

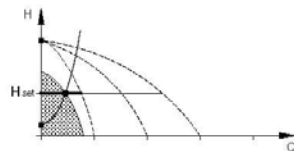


### Hydro MPC-E

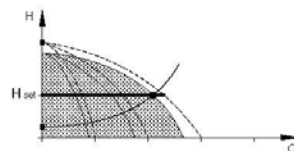
Hydro MPC booster set with three CR(I)E pumps.



One CR(I)E pump in operation.



Three CR(I)E pumps in operation.



- Hydro MPC-E maintains a constant pressure through continuously variable adjustment of the speed of the CR(I)E pumps connected.
- The performance is adjusted to the demand through cutting in/out the required number of CR(I)E pumps and through parallel control of the pumps in operation.
- Pump changeover is automatic and depends on load, time and fault.
- All pumps in operation will run at equal speed.

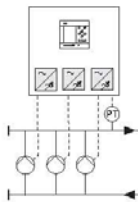
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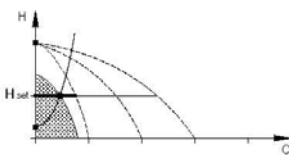
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### Hydro MPC-EF

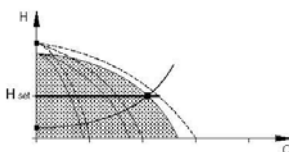
Hydro MPC booster set with three CR pumps connected to external frequency converters in the control cabinet.



One speed-controlled CR pump in operation.



Three speed-controlled CR pumps in operation.



- Hydro MPC-EF maintains a constant pressure through continuously variable adjustment of the speed of the pumps.
- The performance is adjusted to the demand through cutting in/out the required number of pumps and through parallel control of the pumps in operation.
- Pump changeover is automatic and depends on load, time and fault.
- All pumps in operation will run at equal speed.

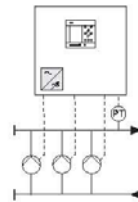
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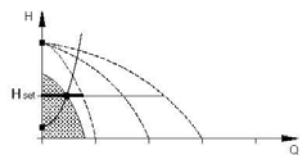
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### Hydro MPC-F

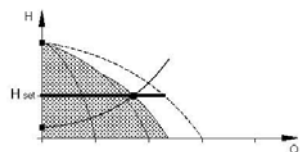
Hydro MPC booster set with three CR pumps connected to one external frequency converter in the control cabinet. The speed controlled operation alternates between the pumps.



One speed-controlled CR pump in operation.



One speed-controlled CR pump and two mains-operated CR pumps in operation.



- Hydro MPC-F maintains a constant pressure through continuously variable adjustment of the speed of the CR pump connected to an external frequency converter. The speed controlled operation alternates between the pumps.
- One CR pump connected to the frequency converter always starts first. If the pressure cannot be maintained by the pump, one or two mains-operated CR pumps will be cut in.
- Pump changeover is automatic and depends on load, time and fault.

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### System Specifications

	MPC-E	MPC-EF / MPC-F
Operating voltage	1 X 220VAC(+/-5%) (UP TO 1.1KW)	N/A
Operating frequency		3 X 415VAC (+/-5%)
Power range	0.37KW TO 22KW	50 to 60hz
Ambient temperature		0.37KW TO 90KW (Please refer to Grundfos for others)
IP rating		0 to 50 deg C
Motor efficiency class		IP 44
Pressure Transmitter	2	EFF1(up to 7.5KW) / EFF2 (up to 22KW)
		2
MPC Components		
Control Unit CU351	1	1
BMS output	Please contact Grundfos for specific requirements	
Variable speed drive	Integrally Fitted Variable Speed Pumps/Motors	MPC-EF : All pumps/motor with external VSD MPC-F: One pump/motor with external VSD for the first unit to operate
High level communication	Please contact Grundfos for specific requirements	
System Warranty	All complete Grundfos booster system supplied are accompanied with the certificate of originality. This subject the supplied booster system to a warranty of 18 months from date of delivery or 12 months from testing & commissioning, whichever is earlier.	