

**Qty. Description**

1 HYDRO MPC E 2 CRIE 20-4



**Note! Product picture may differ from actual product**

Product No.: [99726170](#)

The Grundfos Hydro MPC-E Packaged Pump System is a complete pump set with pumps, valves, suction and discharge manifolds, mounted on a common base. The pump system includes a Control panel designed to Grundfos specification. The Pressure booster system is supplied as compact assembly according to DIN standard 1988/T5

- Hydro MPC-E maintains a constant pressure through continuous adjustment of the speed of the pumps irrespective of the flow rate  
The system performance is adapted to the demand through cutting in/out the required number of pumps and through parallel control of the pumps in operation i.e. cascade.  
Pump changeover is automatic and depends on load, time and fault.

The Grundfos Hydro MPC-E boosting Package is comprised of the following components:

- Pump
    - Parts in contact with the pumped liquid are manufactured in stainless steel EN DIN 1.4301.
- Pump bases and heads are stainless steel (CRI).  
The pumps are equipped with a service-friendly cartridge shaft seal, HQQE (Silicon Carbide/Silicon Carbide/ EPDM).

Pumps are fitted motors, the Grundfos MGE IE5 premium efficiency permanent magnet motors to 11kw and High efficiency IE3 MGE motors 15-22 kW.

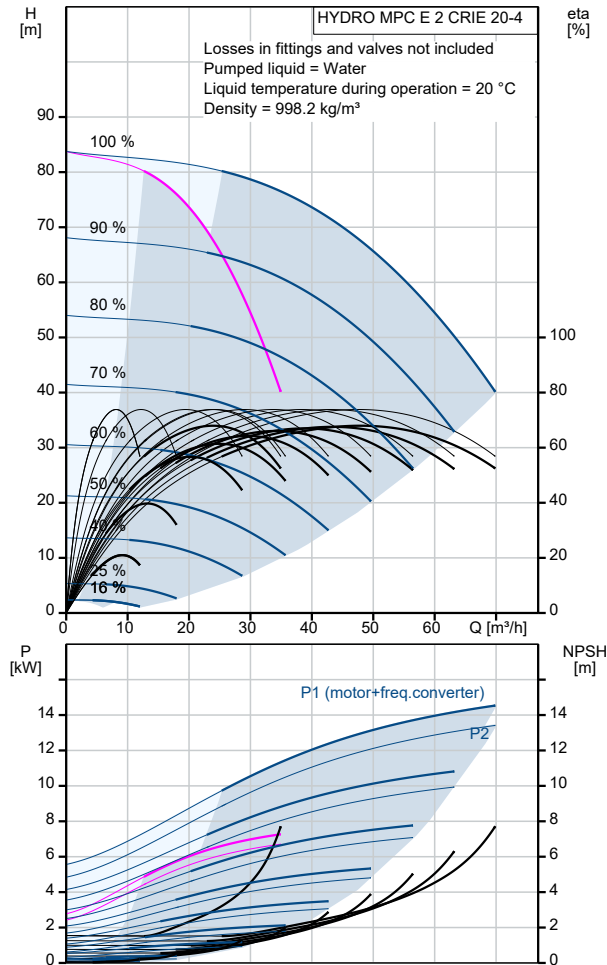
- Manifolds - Two manifolds of stainless steel EN DIN 1.4301 and incorporate loose-ring, epoxy coated, aluminium inlet/outlet flanges to DIN dimension.  
Modular base frame - Pumps are mounted to a common base frame (5 and six pump packages may be split) manufactured in either folded and welded stainless steel or hot dip galvanized fabricated mild steel (system size dependant).
- One non-return valve (POM) and two isolating valves for each pump.  
Non-return valves are certified according to DVGW, isolating valves according to DIN and DVGW.  
Pumps up to 50 N.B will have screwed cad plated brass ball valves pump 80 N.B and over will be fitted with isolation butterfly valves with 316 stainless steel disk and spindle.  
Isolation valves will be fitted on both sides of each main booster pump.  
316SS check valves will be fitted to the suction or discharge side of each main booster pump.
- Adapter with isolating valve for connection of diaphragm tank.  
Pressure gauge and pressure transmitter (analog output 4-20 mA).  
Grundfos CU 352 pump controller in a powder coated steel cabinet, IP 54, including main switch, all required fuses, motor protection, Emergency switches, Operation light in panel door, switching equipment and microprocessor-controlled by the CU 352.

Dry-running protection and diaphragm tank are available according to the list of accessories. Pump operation is controlled by Control MPC with the following functions:

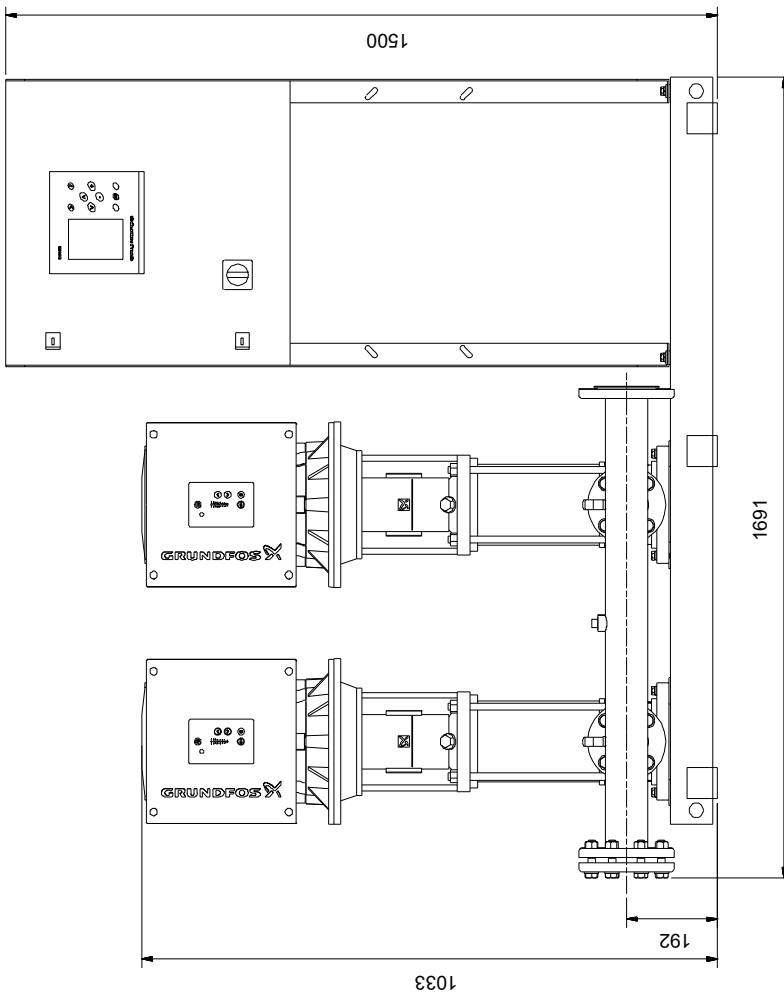
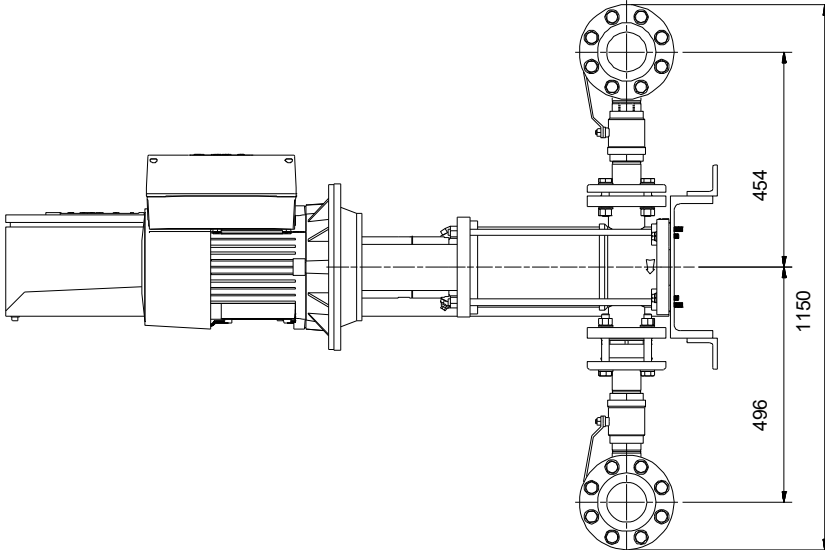
- Intelligent multi-pump controller, CU 352.  
Constant pressure control through continuously variable adjustment of the speed of each individual pump.  
PID controller with adjustable PI parameters (Kp + Ti).  
Constant pressure at setpoint, independent of inlet pressure.

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	<p>           On/off operation at low flow.            Automatic cascade control of pumps for optimum efficiency.            Selection of min. time between start/stop, automatic pump changeover and pump priority.            Automatic pump test function to prevent idle pumps from seizing up.            Possibility of standby pump allocation.            Possibility of backup sensor (redundant primary sensor).            Manual operation.            Display of individual pump run hours            Soft pressure build-up            Internal time clock based operation            Possibility of external setpoint influence            Log function            Setpoint Ramp            Possibility of digital remote-control functions:            System on/off,            Max., min. or user-defined duty            Up to 6 alternative setpoints.            Digital inputs and outputs can be configured individually.            Pump and system monitoring functions:            Minimum and maximum limits of current value            Inlet pressure            Motor protection.            Sensors and cables monitored against malfunction.            Alarm log with the previous 24 warnings/alarms, time &amp; date stamped.            Display and indication functions:            Colour Screen display            Green indicator light for operating indications and red indicator light for fault indications            Potential-free changeover contacts for operation and fault.            Grundfos Bus communication options via Grundfos CIM.            Optional Grundfos Remote Management (GRM)         </p> <p>           Booster system includes panel door mounted system emergency stop button and the additional IP602 panel that includes the following features:         </p> <ul style="list-style-type: none"> <li>• Easy navigation via intuitive push buttons</li> <li>Individual pump run &amp; fault LED's</li> <li>System alarm LED</li> <li>Multifunction pump liquid temperature display</li> <li>Input facility to connect optional pump liquid temperature sensors</li> <li>Pump liquid temperature protection, if optional sensors connected</li> <li>Phase failure indication when optional phase failure protection is included</li> <li>Alarm reset/mute of audible alarm button</li> </ul> <p>           There are options to upgrade the pressure boosting system.         </p> <table border="0"> <tr> <td>Flow media:</td> <td>Water</td> </tr> <tr> <td>Allowed liquid temp.:</td> <td>5 °C .. 60 °C</td> </tr> <tr> <td>System pressure max.:</td> <td>16 bar</td> </tr> <tr> <td>Flow (Plant):</td> <td>70 m³/h</td> </tr> <tr> <td>Mains suply:</td> <td>380-415 V</td> </tr> <tr> <td>Nom. current of plant:</td> <td>30.4 A</td> </tr> <tr> <td>Nominal power:</td> <td>7.5 kW</td> </tr> <tr> <td>Net weight:</td> <td>448 kg</td> </tr> </table>	Flow media:	Water	Allowed liquid temp.:	5 °C .. 60 °C	System pressure max.:	16 bar	Flow (Plant):	70 m³/h	Mains suply:	380-415 V	Nom. current of plant:	30.4 A	Nominal power:	7.5 kW	Net weight:	448 kg
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Description	Value
<b>General information:</b>	
Product name:	HYDRO MPC E 2 CRIE 20-4
Product No:	99726170
EAN number:	5713833449469
<b>Technical:</b>	
Rated flow:	50 m <sup>3</sup> /h
Max flow:	70 m <sup>3</sup> /h
Max flow:	70 m <sup>3</sup> /h
Rated head:	67 m
Head max:	63 m
Main pump name:	CRIE 20-4
Main pump No:	99525552
Number of pumps:	2
<b>Materials:</b>	
Manifolds:	EN/DIN 1.4571/ AISI 316 TI
<b>Installation:</b>	
Range of ambient temperature:	5 .. 40 °C
Maximum operating pressure:	16 bar
Manifold inlet:	DN80
Manifold outlet:	DN80
Pressure rating:	PN 16
Earth connection:	N, PE
System design:	A
<b>Liquid:</b>	
Pumped liquid:	Water
Liquid temperature range:	5 .. 60 °C
Selected liquid temperature:	20 °C
Density:	998.2 kg/m <sup>3</sup>
<b>Electrical data:</b>	
Power (P2) main pump:	7.5 kW
Mains frequency:	50 / 60 Hz
Rated voltage:	3 x 380-415 V
Rated current of system:	30.4 A
Start. method:	Variable frequency drives
Enclosure class (IEC 34-5):	IP54
Radio interference supression:	EMC DIRECTIVE(2014/30/EU)
Number of phases of main pump:	3
<b>Controls:</b>	
Control type:	E
Dry running protection, mechanical:	NONE
<b>Tank:</b>	
Volume of pressure tank:	18 l
Diaphragm tank:	YES
<b>Others:</b>	
Net weight:	448 kg
Gross weight:	506 kg
Sales region:	Australia
Config. file no:	99059189
Config.file Control MPC:	98271946
Config.file Hydro MPC:	98272012
Country of origin:	AU
Custom tariff no.:	8413709062



## 99726170 HYDRO MPC E 2 CRIE 20-4



Note! All units are in [mm] unless others are stated.  
Disclaimer: This simplified dimensional drawing does not show all details.