

PROJECT:	Magna-1	UNIT TAG:	_____	QUANTITY:	1
REPRESENTATIVE:	Hurley Engineering	TYPE OF SERVICE:	Cast Iron Pump Configuration	DATE:	_____
ENGINEER:	TBD	SUBMITTED BY:	Devin Carle	DATE:	_____
CONTRACTOR:	TBD	APPROVED BY:	_____	DATE:	_____
		ORDER NO.:	_____	DATE:	_____

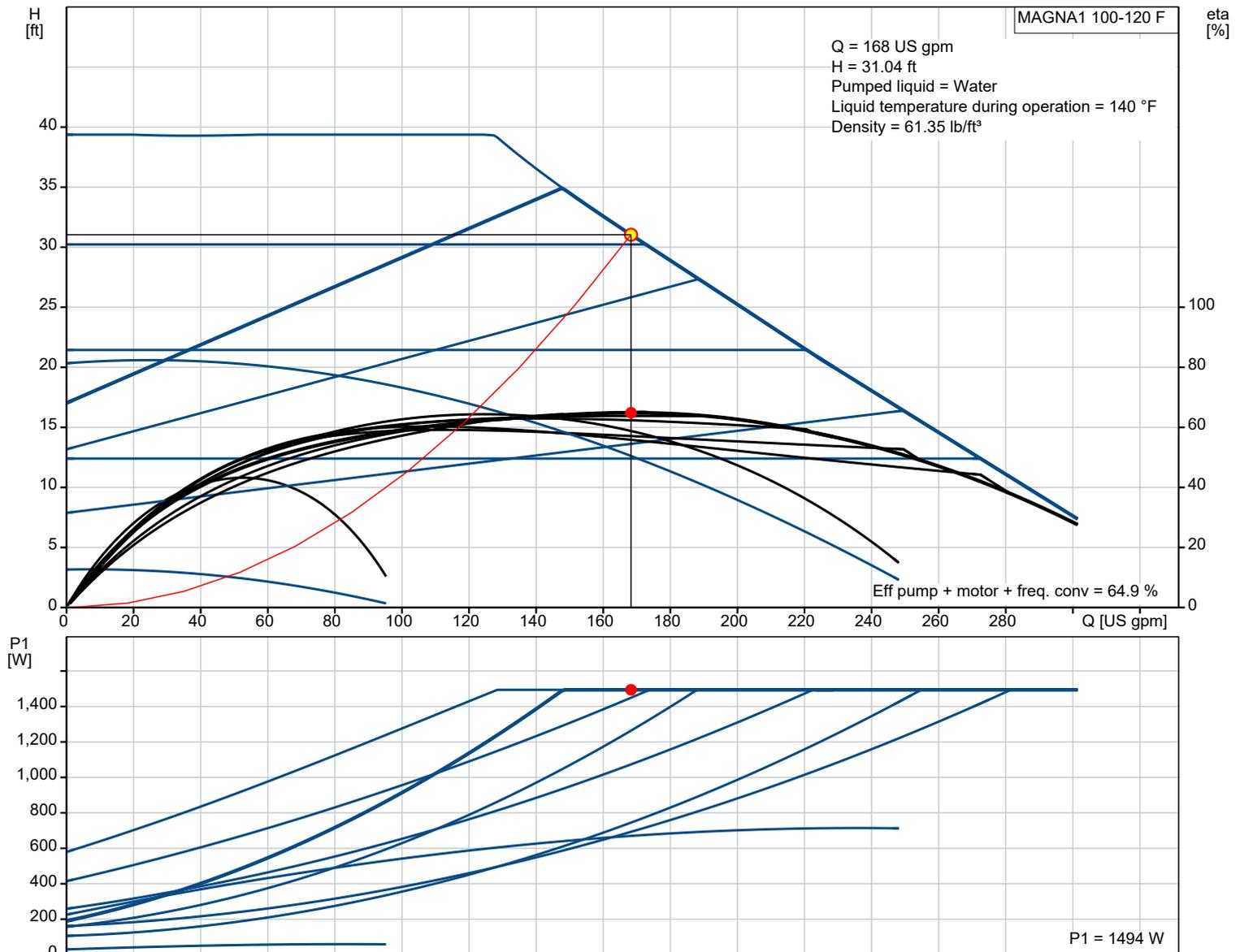


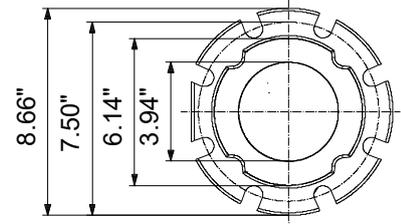
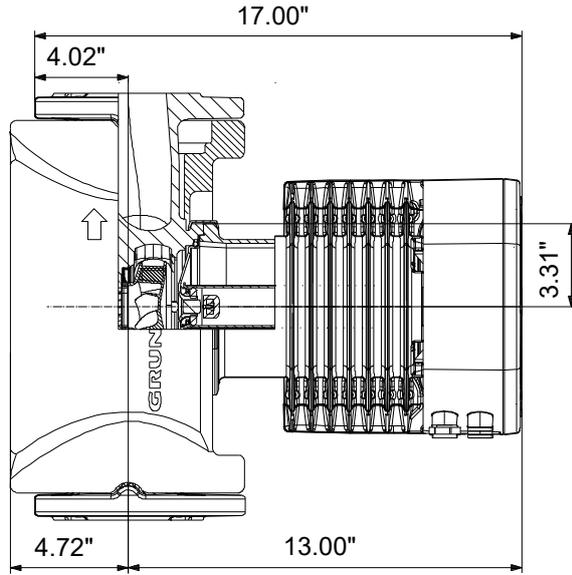
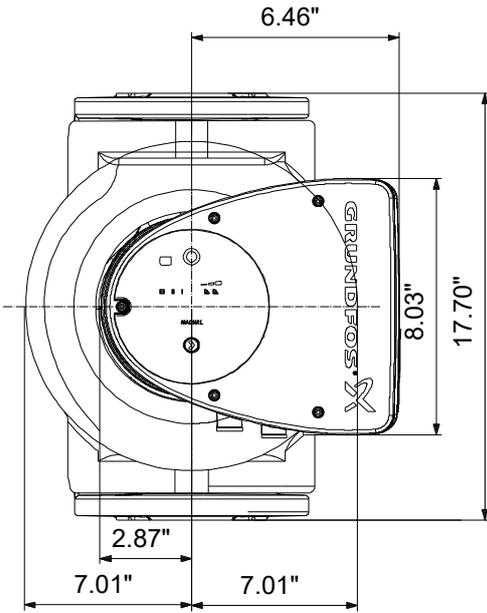
## MAGNA1 100-120 F

The simple option for a job well done. The product has an intuitive user interface, which is especially fit for replacement of older circulators. The ideal choice for basic functionality needs.

Product photo could vary from the actual product

Conditions of Service		Pump Data		Motor Data	
Flow:	168 US gpm	Maximum operating pressure:	174.05 psi	P1 max:	31 .. 1523 W
Head:	31.04 ft	Liquid temperature range:	14 .. 230 °F	Rated voltage:	208-230 V
Efficiency:	64.9 %	Maximum ambient temperature:	104 °F	Main frequency:	60 Hz
Liquid:	Water	Approvals:	98544607	Enclosure class:	X4D
Temperature:	140 °F	Flange standard:	GF	Insulation class:	F
NPSH required:	ft	Pipe connection:	GF100		
Specific Gravity:	0.985	Product number:	On request		





**Materials:**

- Pump housing: Cast iron
- Pump housing: EN-GJL-250
- Pump housing: ASTM A48-250B
- Impeller: PES 30%GF

Count	Description																														
1	<p data-bbox="119 230 343 253"><b>MAGNA1 100-120 F</b></p> <div data-bbox="220 304 395 510" data-label="Image"> </div> <p data-bbox="119 555 395 577">Product No.: On request</p> <p data-bbox="119 611 1572 813">           MAGNA1 circulator pump with easy selection of pump setting            The pump is of the canned-rotor type, i.e. pump and motor form an integral unit without shaft seal and with only two gaskets for sealing.             The bearings are lubricated by the pumped liquid.            In order to avoid problems in connection with disposal, great importance has been attached to using as few different materials as possible.            A pump with no maintenance requirements and extremely low life cycle cost.         </p> <p data-bbox="119 846 300 869">Heating systems</p> <ul data-bbox="119 880 403 992" style="list-style-type: none"> <li>• Main pump</li> <li>• mixing loops</li> <li>• heating surfaces</li> <li>• air-conditioning surfaces.</li> </ul> <p data-bbox="119 1003 1484 1070">The MAGNA1 circulator pumps are designed for circulating liquids in heating systems with variable flows where it is desirable to optimize the setting of the pump duty point, thus reducing energy costs. The pumps are also suitable for domestic hot-water systems.</p> <p data-bbox="119 1081 1369 1193">To ensure correct operation, it is important that the sizing range of the system falls within the duty range of the pump. The pump is also suitable for systems with hot-water priority as an external signal can immediately force the pump to operate according to the max. curve, for example in solar-heating systems.</p> <p data-bbox="119 1227 212 1249">Benefits</p> <ul data-bbox="119 1261 1465 1462" style="list-style-type: none"> <li>• Safe selection.</li> <li>• Simple installation.</li> <li>• Low energy consumption. All MAGNA1 pumps comply with the EuP requirements.</li> <li>• Nine light fields for indication of pump setting. Three proportional-pressure curves, three constant-pressure curves and three fixed-speed curves are available.</li> <li>• Low noise level.</li> <li>• No maintenance and long life.</li> </ul> <p data-bbox="119 1496 196 1518">Liquid:</p> <table data-bbox="119 1529 611 1641"> <tr> <td>Pumped liquid:</td> <td>Water</td> </tr> <tr> <td>Liquid temperature range:</td> <td>14 .. 230 °F</td> </tr> <tr> <td>Selected liquid temperature:</td> <td>140 °F</td> </tr> <tr> <td>Density:</td> <td>61.35 lb/ft<sup>3</sup></td> </tr> </table> <p data-bbox="119 1675 236 1697">Technical:</p> <table data-bbox="119 1709 619 1821"> <tr> <td>Actual calculated flow:</td> <td>168 US gpm</td> </tr> <tr> <td>Resulting head of the pump:</td> <td>31.04 ft</td> </tr> <tr> <td>TF class:</td> <td>110</td> </tr> <tr> <td>Approvals on nameplate:</td> <td>98544607</td> </tr> </table> <p data-bbox="119 1854 228 1877">Materials:</p> <table data-bbox="119 1888 667 2000"> <tr> <td>Pump housing:</td> <td>Cast iron EN-GJL-250 ASTM A48-250B</td> </tr> <tr> <td>Impeller:</td> <td>PES 30%GF</td> </tr> </table> <p data-bbox="119 2033 244 2056">Installation:</p> <table data-bbox="119 2067 611 2201"> <tr> <td>Range of ambient temperature:</td> <td>32 .. 104 °F</td> </tr> <tr> <td>Maximum operating pressure:</td> <td>174.05 psi</td> </tr> <tr> <td>Flange standard:</td> <td>GF</td> </tr> <tr> <td>Pipe connection:</td> <td>GF100</td> </tr> <tr> <td>Pressure stage:</td> <td>PN12</td> </tr> </table>	Pumped liquid:	Water	Liquid temperature range:	14 .. 230 °F	Selected liquid temperature:	140 °F	Density:	61.35 lb/ft <sup>3</sup>	Actual calculated flow:	168 US gpm	Resulting head of the pump:	31.04 ft	TF class:	110	Approvals on nameplate:	98544607	Pump housing:	Cast iron EN-GJL-250 ASTM A48-250B	Impeller:	PES 30%GF	Range of ambient temperature:	32 .. 104 °F	Maximum operating pressure:	174.05 psi	Flange standard:	GF	Pipe connection:	GF100	Pressure stage:	PN12
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Company name: Hurley Engineering

Created by:

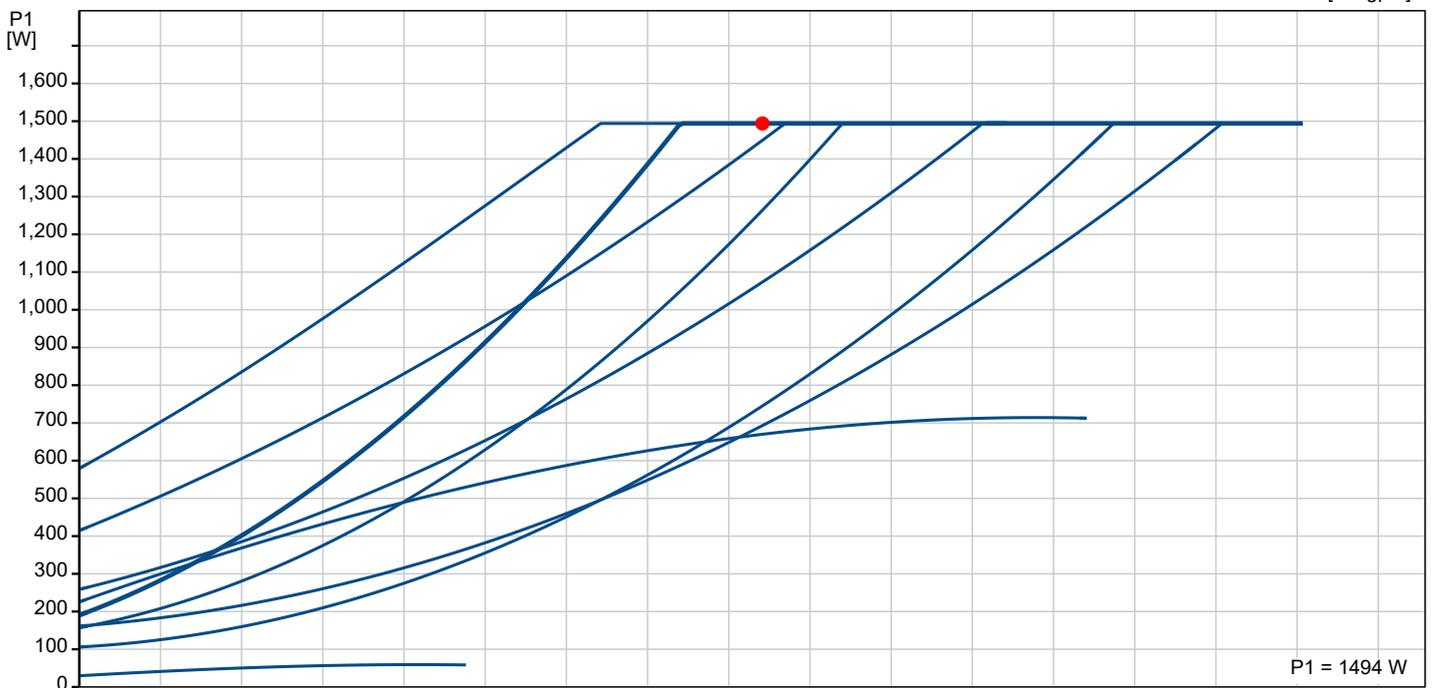
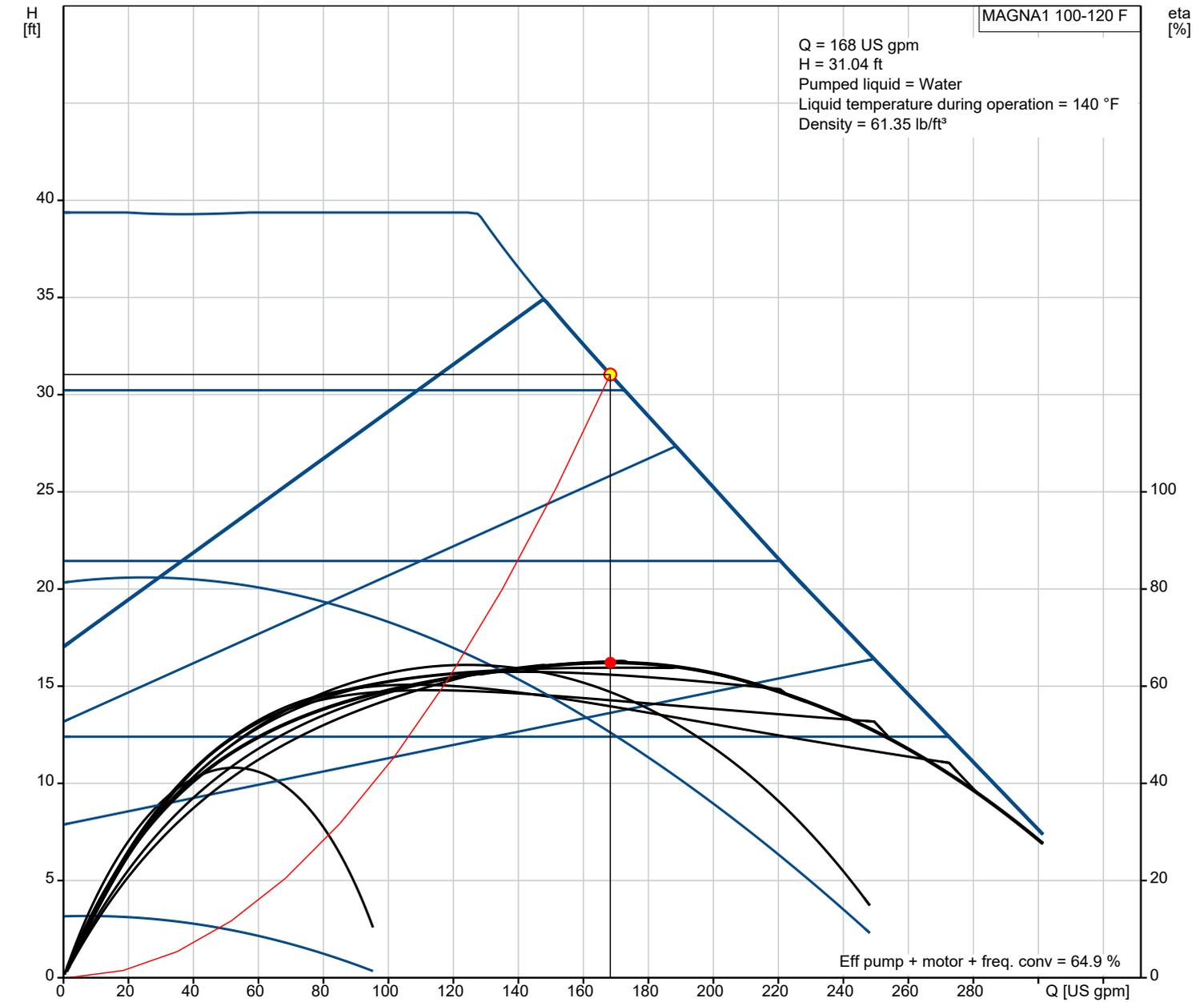
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Date:

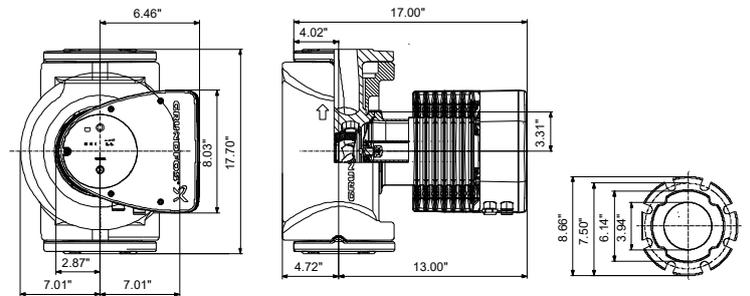
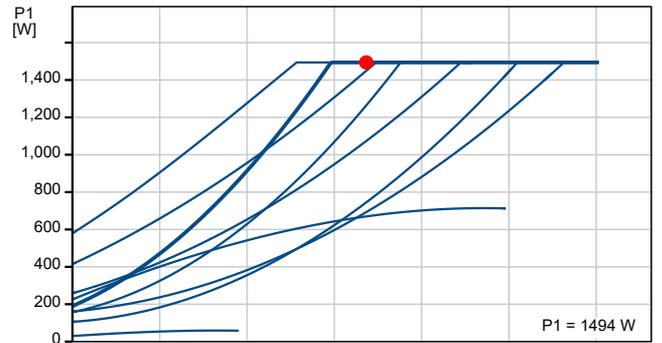
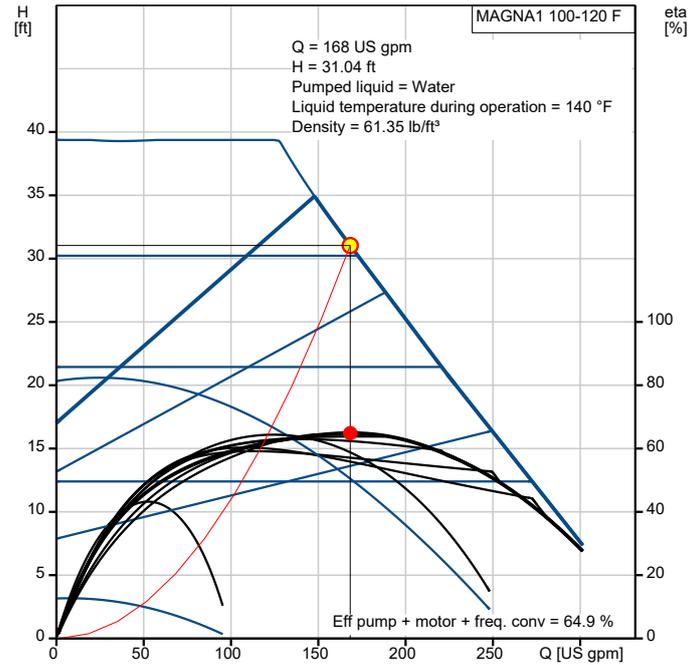
4/22/2021

Count	Description
	Port-to-port length: 17 3/4 in
	Electrical data:
	Power input - P1: 31 .. 1523 W
	Main frequency: 60 Hz
	Rated voltage: 1 x 208-230 V
	Maximum current consumption: 0.32 .. 6.73 A
	Enclosure class (IEC 34-5): X4D
	Insulation class (IEC 85): F
	Others:
	Energy (EEI): 0.21
	Net weight: 75.4 lb
	Gross weight: 81.8 lb
	Shipping volume: 3.21 ft <sup>3</sup>
	Country of origin: US
	Custom tariff no.: 8413.70.2015

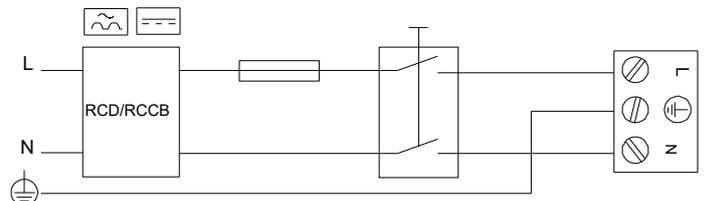
## On request MAGNA1 100-120 F 60 Hz



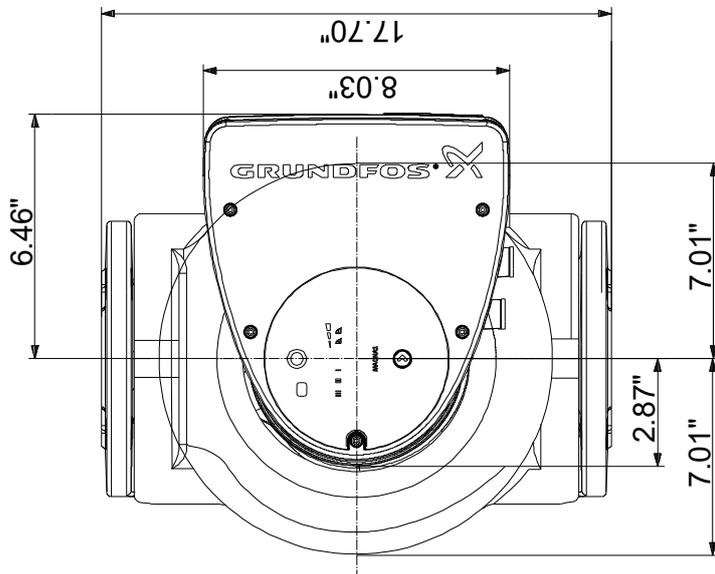
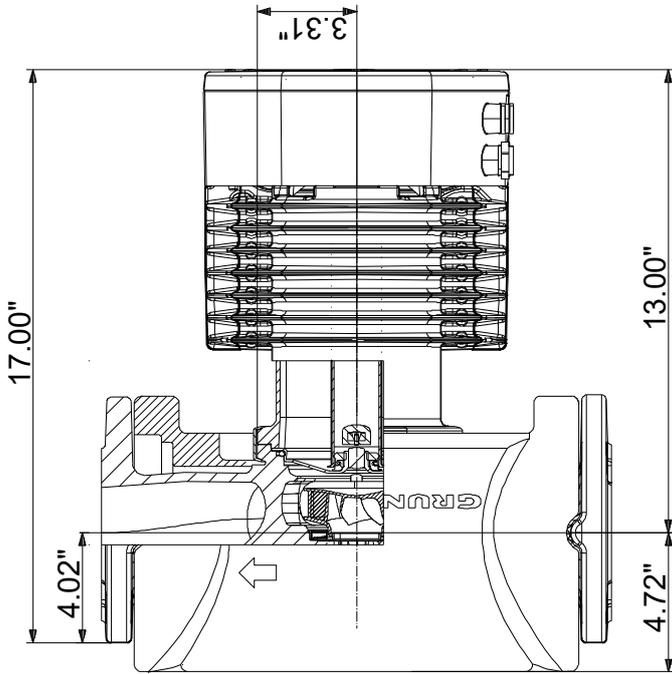
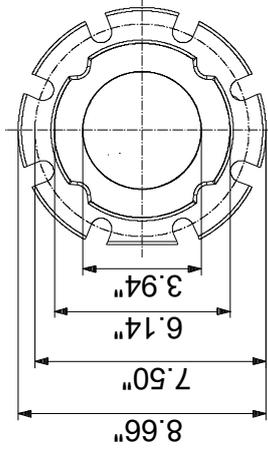
Description	Value
<b>General information:</b>	
Product name:	MAGNA1 100-120 F
Product No.:	On request
EAN:	On request
<b>Technical:</b>	
Actual calculated flow:	168 US gpm
Resulting head of the pump:	31.04 ft
Head max:	39.37 ft
TF class:	110
Approvals on nameplate:	98544607
Model:	B
<b>Materials:</b>	
Pump housing:	Cast iron
Pump housing:	EN-GJL-250
Pump housing:	ASTM A48-250B
Impeller:	PES 30%GF
<b>Installation:</b>	
Range of ambient temperature:	32 .. 104 °F
Maximum operating pressure:	174.05 psi
Flange standard:	GF
Pipe connection:	GF100
Pressure stage:	PN12
Port-to-port length:	17 3/4 in
<b>Liquid:</b>	
Pumped liquid:	Water
Liquid temperature range:	14 .. 230 °F
Selected liquid temperature:	140 °F
Density:	61.35 lb/ft³
<b>Electrical data:</b>	
Power input - P1:	31 .. 1523 W
Main frequency:	60 Hz
Rated voltage:	1 x 208-230 V
Maximum current consumption:	0.32 .. 6.73 A
Enclosure class (IEC 34-5):	X4D
Insulation class (IEC 85):	F
<b>Others:</b>	
Energy (EEL):	0.21
Net weight:	75.4 lb
Gross weight:	81.8 lb
Shipping volume:	3.21 ft³
Country of origin:	US
Custom tariff no.:	8413.70.2015



Example of mains-connected motor with mains switch, backup fuse and additional protection

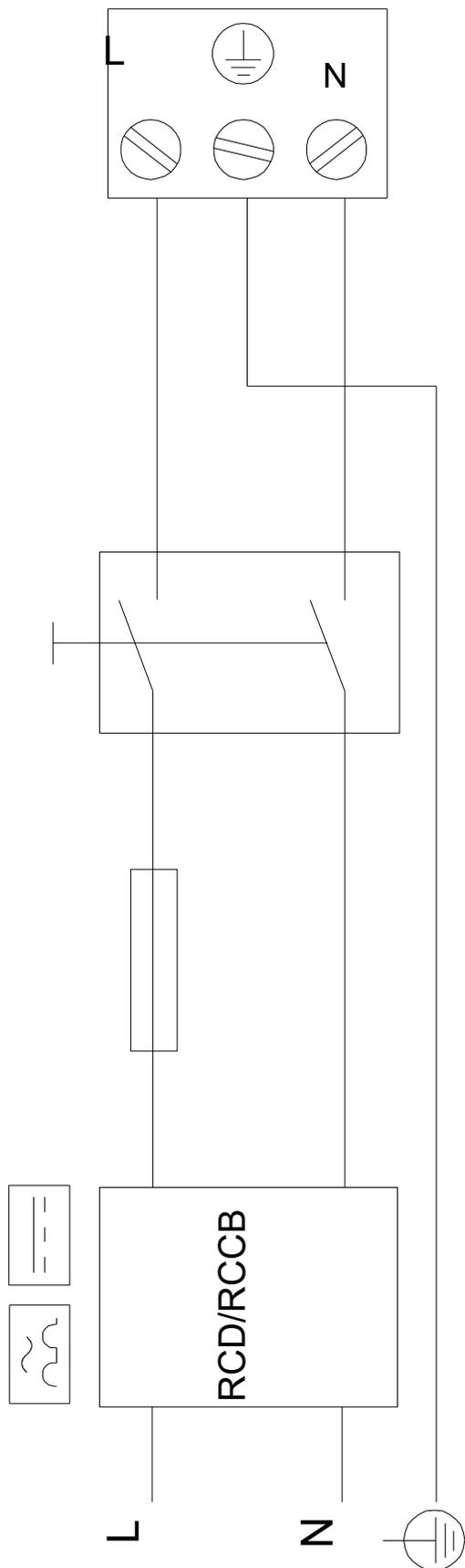


## On request MAGNA1 100-120 F 60 Hz



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Example of mains-connected motor  
with mains switch, backup fuse and additional protection





**Company name:** Hurley Engineering

**Created by:**

**Phone:**

**Date:**

4/22/2021

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**Order Data:**

Product name: MAGNA1 100-120 F

Amount: 1

Product No.: On request

Total: Price on request

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