

# Submittal Data

PROJECT:	Magna-3	UNIT TAG:		QUANTITY:	1
		TYPE OF SERVICE:	Stainless Steel Pump Configuration		
REPRESENTATIVE:	Hurley Engineering	SUBMITTED BY:	Devin Carle	DATE:	
ENGINEER:	TBD	APPROVED BY:		DATE:	
CONTRACTOR:	TBD	ORDER NO.:		DATE:	

## MAGNA3 40-80 F N



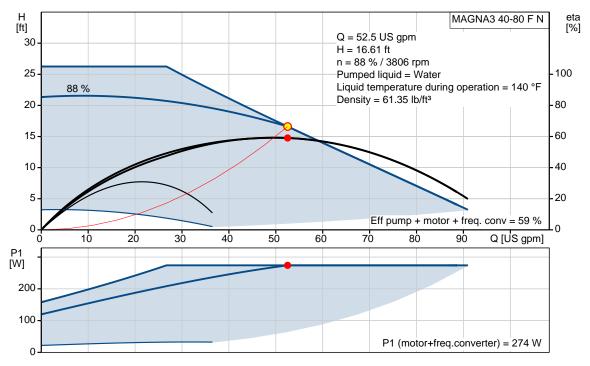
Full range of intelligent, high-efficiency circulators for heating, cooling, ground source heat pump systems and domestic hot water applications

Product photo could vary from the actual product

Conditions of Service				
Flow:	52.5 US gpm			
Head:	16.61 ft			
Efficiency:	59 %			
Liquid:	Water			
Temperature:	140 °F			
NPSH required:	ft			
Viscosity:				
Specific Gravity:	0.985			

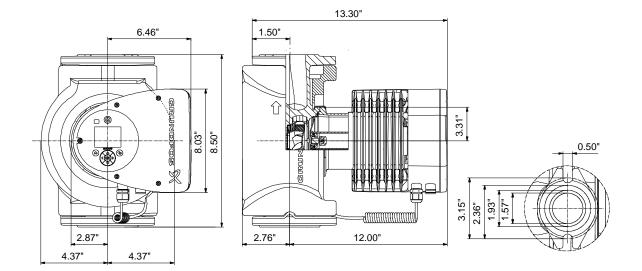
Pump Data	
Maximum operating pressure:	174.05 psi
Liquid temperature range:	14 230 °F
Maximum ambient temperature:	104 °F
Approvals:	98544604
Flange standard:	GF
Pipe connection:	GF15/26/40/43
Product number:	98126830

Motor Data				
P1 max:	16 274 W			
Rated voltage:	208-230 V			
Main frequency:	60 Hz			
Enclosure class:	X4D			
Insulation class:	F			





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### Materials:

Pump housing: Stainless steel

EN 1.4308

ASTM 351 CF8

Impeller: PES 30%GF



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MAGNA3 40-80 F N



Product No.: 98126830

#### MAGNA3 - More than a pump

With its unrivalled efficiency, all-encompassing range and built-in communication capabilities plus functionalities replacing system components, the MAGNA3 is ideal for engineers and specifiers looking to create high-performance systems for buildings.

This pump in the Grundfos Master Class will fit both heating and cooling applications perfectly, making it the obvious choice for almost any building project – old or new.

The MAGNA3 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.

The innovative clamp with only one screw enables easy repositioning of the pump head. The MAGNA3 is a pump with no maintenance requirements and with extremely low Life Cycle Cost.

The pump is characterised by the following:

- controller integrated in the control box
- control panel with TFT display on the control box
- · control box prepared for optional CIM modules
- built-in differential-pressure and temperature sensor
- cast-iron pump housing (depending on model)
- carbon-fiber-reinforced composite rotor can
- stainless-steel bearing plate and rotor cladding
- · aluminium alloy stator housing
- air-cooled power electronics

The MAGNA3 is a single-phase pump.

#### Characteristic features

- AUTOADAPT.
- FLOWADAPT and FLOWLIMIT (more than a pump function as it reduces the need for pump throttling valves).
- Proportional-pressure control.
- Constant-pressure control.
- Constant-temperature control.
- · Constant-curve duty.
- Max. or min. curve duty.
- · Automatic Night Setback.
- No external motor protection required.
- Insulating shells supplied with single-head pumps for heating systems.
- Large temperature range where the liquid temperature and the ambient temperature are independent of each other.

#### Communication

The MAGNA3 enables communication via the following:



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- wireless Grundfos GO Remote
- fieldbus communication via CIM modules
- digital inputs
- relay outputs
- analog input (more than a pump function as heat energy meter)

#### Motor and electronic controller

The MAGNA3 incorporates a 4-pole synchronous, permanent-magnet motor (PM motor). This motor type is characterised by higher efficiency than a conventional asynchronous squirrel-cage motor.

The pump speed is controlled by an integrated frequency converter.

A differential-pressure and temperature sensor is incorporated in the pump.

#### Liquid:

Pumped liquid: Water
Liquid temperature range: 14 .. 230 °F
Selected liquid temperature: 140 °F
Density: 61.35 lb/ft³

#### Technical:

Actual calculated flow: 52.5 US gpm
Resulting head of the pump: 16.61 ft
TF class: 110
Approvals on nameplate: 98544604

### Materials:

Pump housing: Stainless steel

EN 1.4308

ASTM 351 CF8

Impeller: PES 30%GF

#### Installation:

Range of ambient temperature: 32 .. 104 °F Maximum operating pressure: 174.05 psi

Flange standard: GF

Pipe connection: GF15/26/40/43

Pressure stage: PN12
Port-to-port length: 8 9/16 in

### Electrical data:

Power input - P1: 16 .. 274 W
Main frequency: 60 Hz
Rated voltage: 1 x 208-230 V
Maximum current consumption: 0.19 .. 1.36 A

Enclosure class (IEC 34-5): X4D Insulation class (IEC 85): F

### Others:

Energy (EEI):

Net weight:

Gross weight:

Shipping volume:

Country of origin:

0.19

32.3 lb

35.6 lb

1060 ft³

US

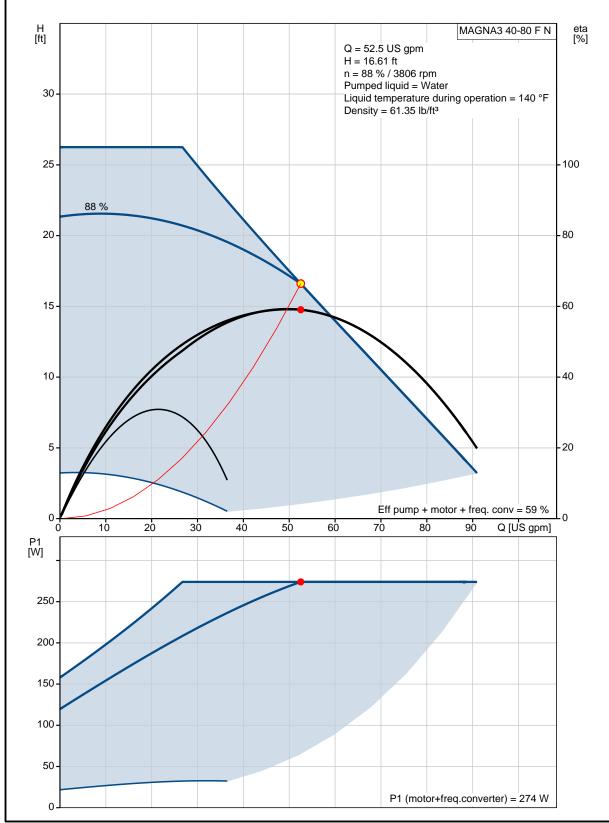
Custom tariff no.: 8413.70.2005



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## 98126830 MAGNA3 40-80 F N 60 Hz

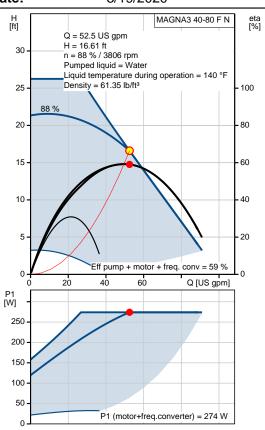


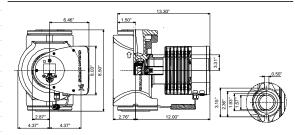


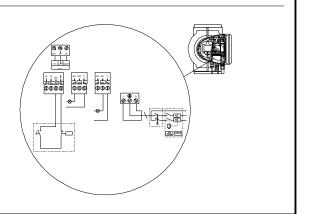
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Description	Value
General information:	
Product name:	MAGNA3 40-80 F N
Product No.:	98126830
EAN:	5710629499929
	5710629499929
Technical:	
Actual calculated flow:	52.5 US gpm
Resulting head of the pump:	16.61 ft
Head max:	26.25 ft
TF class:	110
Approvals on nameplate:	98544604
Model:	D
Materials:	
Pump housing:	Stainless steel
	EN 1.4308
	ASTM 351 CF8
Impeller:	PES 30%GF
Installation:	
Range of ambient temperature:	32 104 °F
Maximum operating pressure:	174.05 psi
Flange standard:	GF
Pipe connection:	GF15/26/40/43
Pressure stage:	PN12
Port-to-port length:	8 9/16 in
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	14 230 °F
Selected liquid temperature:	140 °F
Density:	61.35 lb/ft <sup>3</sup>
Electrical data:	
Power input - P1:	16 274 W
Main frequency:	60 Hz
Rated voltage:	1 x 208-230 V
Maximum current consumption:	0.19 1.36 A
Enclosure class (IEC 34-5):	X4D
Insulation class (IEC 85):	F
Others:	
Energy (EEI):	0.19
Net weight:	32.3 lb
Gross weight:	35.6 lb
Shipping volume:	1060 ft <sup>3</sup>
Country of origin:	US
Custom tariff no.:	8413.70.2005







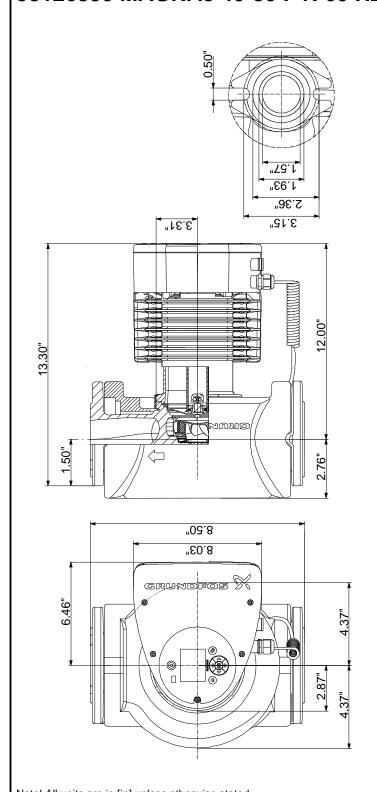


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Note! All units are in [in] unless otherwise stated. Disclaimer: This simplified dimensional drawing does not show all details.



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