

# Submittal Data

PROJECT:	UNIT TAG:	QUANTITY:
REPRESENTATIVE: _____	TYPE OF SERVICE:	DATE: _____
ENGINEER:	SUBMITTED BY:	DATE:
CONTRACTOR:	APPROVED BY:	DATE:
	ORDER NO.:	DATE:

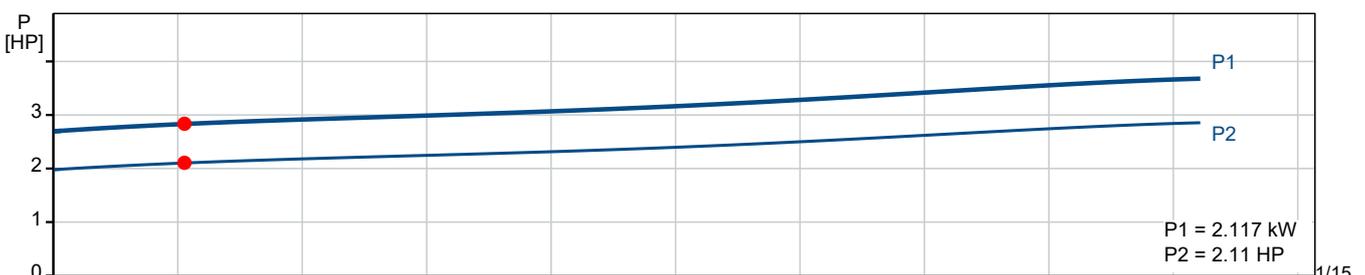
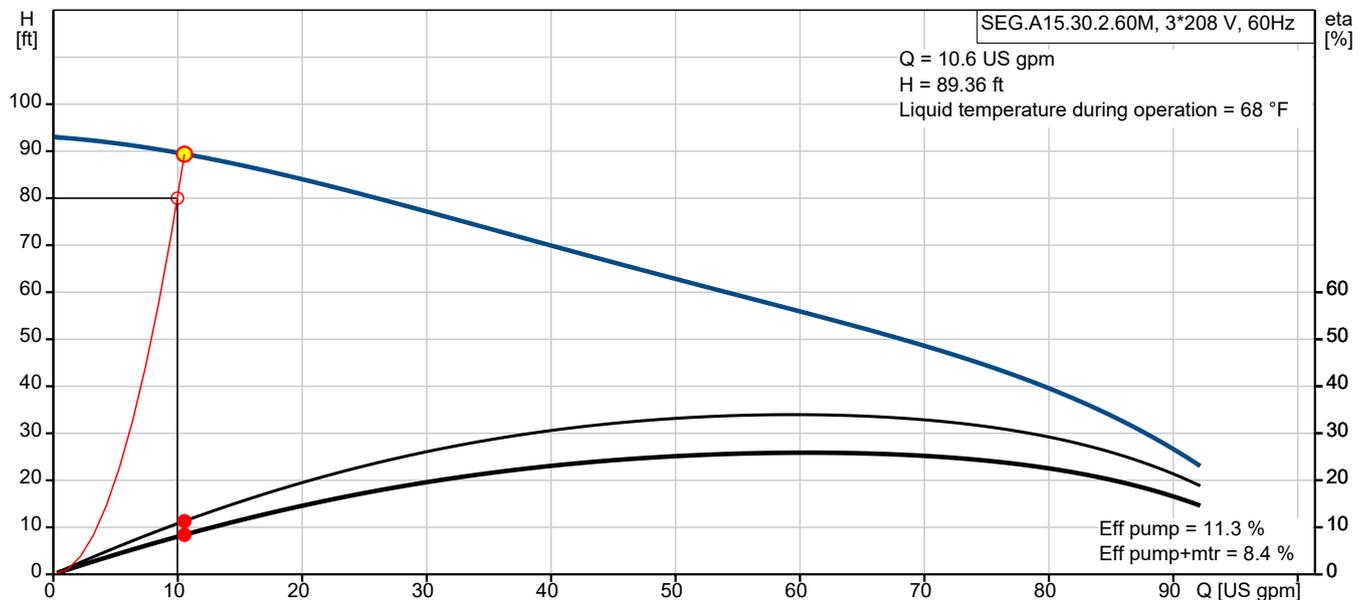


## SEG.A15.30.2.60M

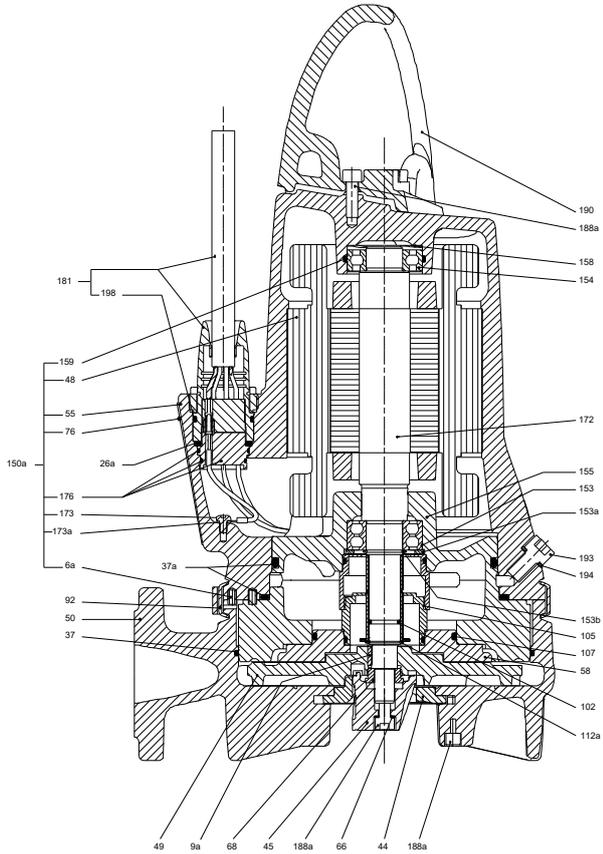
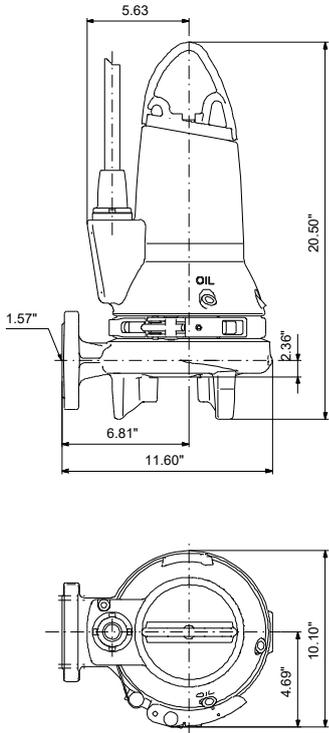
Grinder pumps 2-5.5HP are the perfect choice for pumping effluent and untreated sewage. The SEG combines dependability, efficiency and cost-effectiveness. These pumps are built for commercial, municipal and industrial wastewater.

Product photo could vary from the actual product

Conditions of Service		Pump Data		Motor Data	
Flow:	10.6 US gpm	Maximum operating pressure:	87.02 psi	Rated voltage:	200-230 V
Head:	89.36 ft	Liquid temperature range:	32 .. 104 °F	Main frequency:	60 Hz
Efficiency:	8.4 %	Maximum ambient temperature:	104 °F	Number of poles:	2
Temperature:	68 °F	Flange standard:	ANSI	Enclosure class:	IP68
NPSH required:	32.81 ft	Product number:	98280853	Insulation class:	F
Specific Gravity:	1.000			Motor protection:	THERMAL SWITCH
				Thermal protection:	external



# Submittal Data



**Materials:**  
 Pump housing: Cast iron  
 EN1561 EN-GJL-200  
 ASTM ASTM A48 30B  
 Impeller: Cast iron  
 EN1561 EN-GJL-200  
 ASTM ASTM A48 30B

Count	Description
-------	-------------

1

SEG.A15.30.2.60M



Product photo could vary from the actual product

Product No.: [98280853](#)

Grundfos SEG grinder pumps are non-self-priming, single-stage, centrifugal pumps with horizontal discharge port, specifically designed for pumping wastewater containing discharge from toilets. The pump is equipped with a grinder system that grinds destructible solids into small pieces to lead them through pipes with a relatively small diameter.

SEG grinder pumps are ideal for use in sparsely populated areas, where gravity sewage systems are not available. Examples include villages, farm areas and areas with large terrain-level differences, where a pressurised system has advantages.

The pump is available for two types of installation:

- submerged installation on auto-coupling systems
- submerged installation, free-standing.

The pump is made of wear-resistant materials, such as cast iron and stainless steel. These materials ensure reliable operation.

The surface of the pump is smooth to prevent dirt and impurities from sticking.

The corrosion-resistant stainless steel clamp is securing the motor to the pump housing and allow the easy service of the pump.

SmartTrim system allows easy adjustment of the impeller clearance to ensure maximum efficiency during the pump lifespan.

The range is designed to reduce energy consumption and keep downtime costs to a minimum, while maintaining peak performance throughout the lifespan of the system.

### Further product details

This grinder pump is specially designed for pumping effluent and untreated domestic sewage in areas with no sewer system or where gravitation systems are unsuitable.

The pump is designed for transfer of domestic and municipal wastewater:

- in sparsely populated areas
- in small villages and farms
- in areas of difficult topography
- in areas with high groundwater

The pump can also remove industrial wastewater containing fibres in industrial applications, such as washing plants.

### Pump

The pump is primarily made of cast iron with surface treatment of powder coating: black NCS9000N/RAL 9005, gloss 30, thickness 100 µ.

The pump features a patented grinder system, ensuring extremely high efficiency and reliable operation. Quick and easy dismantling for replacement of wear parts. No special tools are required.

Count	Description
-------	-------------

1



A stainless-steel clamp connection between motor and pump housing ensures easy inspection and service of the impeller and shaft seal.

This pump is equipped with the unique SmartTrim system that enables you to easily restore the factory-set impeller clearance and maintain peak pumping efficiency.

To do this, remove the cutter head and adjust the SmartTrim nut on the impeller.

This can be done on site without dismantling the pump and without using special tools.

The pump has been tested and approved by CSA.

**Motor**

The motor is a watertight, totally encapsulated motor, supplied with a 33 ft power cable.

The stainless-steel plug is fastened with a union nut.

This nut and O-rings provide sealing against ingress of the liquid.

The plug is polyurethane-embedded, ensuring a watertight and durable seal around the leads of the cable.

This prevents the ingress of water into the motor through the cable in case of cable breakage or adverse handling in connection with installation or service.

The motor construction is compact with a short shaft. This reduces vibrations, resulting in an increased efficiency and life of the shaft seal and ball bearings. The motor has two thermal switches in the motor windings to protect the motor against overheating.

Controls:

Moisture sensor: with moisture sensors

AUTOADAPT: No

Liquid:

Liquid temperature range: 32 .. 104 °F

Selected liquid temperature: 68 °F

Density: 62.29 lb/ft<sup>3</sup>

Technical:

Actual calculated flow: 10.6 US gpm

Resulting head of the pump: 89.36 ft

Type of impeller: Grinder System

Primary shaft seal: SIC/SIC

Approvals: PA-I

Curve tolerance: ANSI/HI11.6:2017 3B2

Materials:

Pump housing: Cast iron  
EN1561 EN-GJL-200  
ASTM ASTM A48 30B

Impeller: Cast iron  
EN1561 EN-GJL-200  
ASTM ASTM A48 30B

Installation:

Maximum ambient temperature: 104 °F

Maximum operating pressure: 87.02 psi

Flange standard: ANSI

Pipework connection: 1 1/2" /2"

Size of outlet port: 1 1/2 inch



Company name: Grundfos

Created by:

Phone:

Date: 5/28/2025

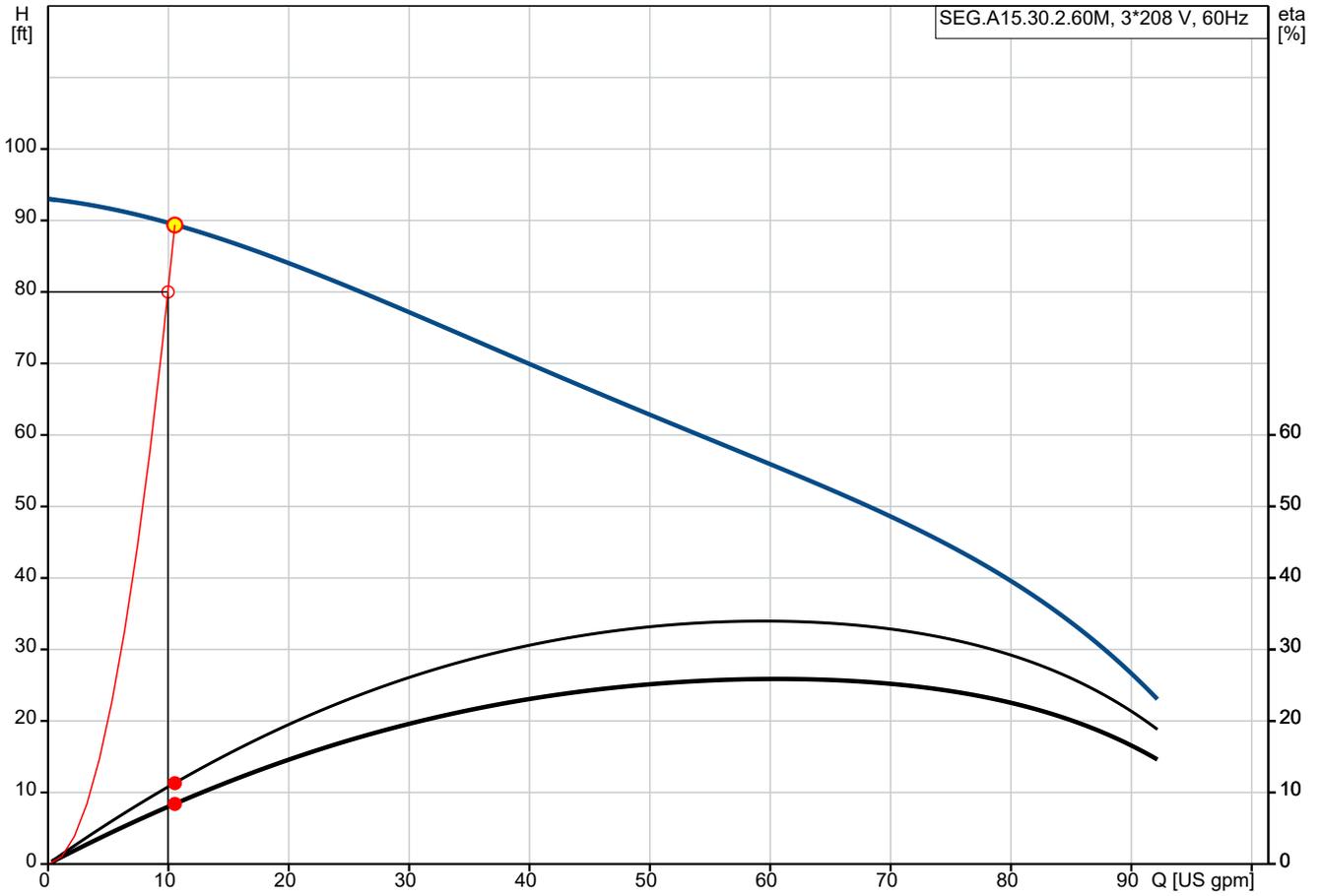
Count	Description
1	<p>Pressure stage: PN 10 Maximum installation depth: 32.8 ft Auto-coupling: 98245788</p> <p>Electrical data: Power input - P1: 2.8 kW Rated power - P2: 3 HP Main frequency: 60 Hz Rated voltage: 3 x 200-230 V Voltage tolerance: +6/-10 % Max starts per. hour: 30 Rated current: 10-9 A RequestedVoltage: 208 V RatedCurrentAtThisVoltage: 9.73 A Starting current: 65 A Rated current at no load: 4.6 A Cos phi - power factor: 0.84 Cos phi - p.f. at 3/4 load: 0.81 Cos phi - p.f. at 1/2 load: 0.7 Rated speed: 3500 rpm Moment of inertia: 0.38 lb ft<sup>2</sup> Motor efficiency at full load: 78 % Motor efficiency at 3/4 load: 75 % Motor efficiency at 1/2 load: 70 % Number of poles: 2 Start. method: direct-on-line Enclosure class (IEC 34-5): IP68 Insulation class (IEC 85): F Explosion proof: no Length of cable: 33 ft Cable type: SEOOW 600V Type of cable plug: No plug</p> <p>Others: Net weight: 101 lb Country of origin: HU Custom tariff no.: 8413.70.2004</p>



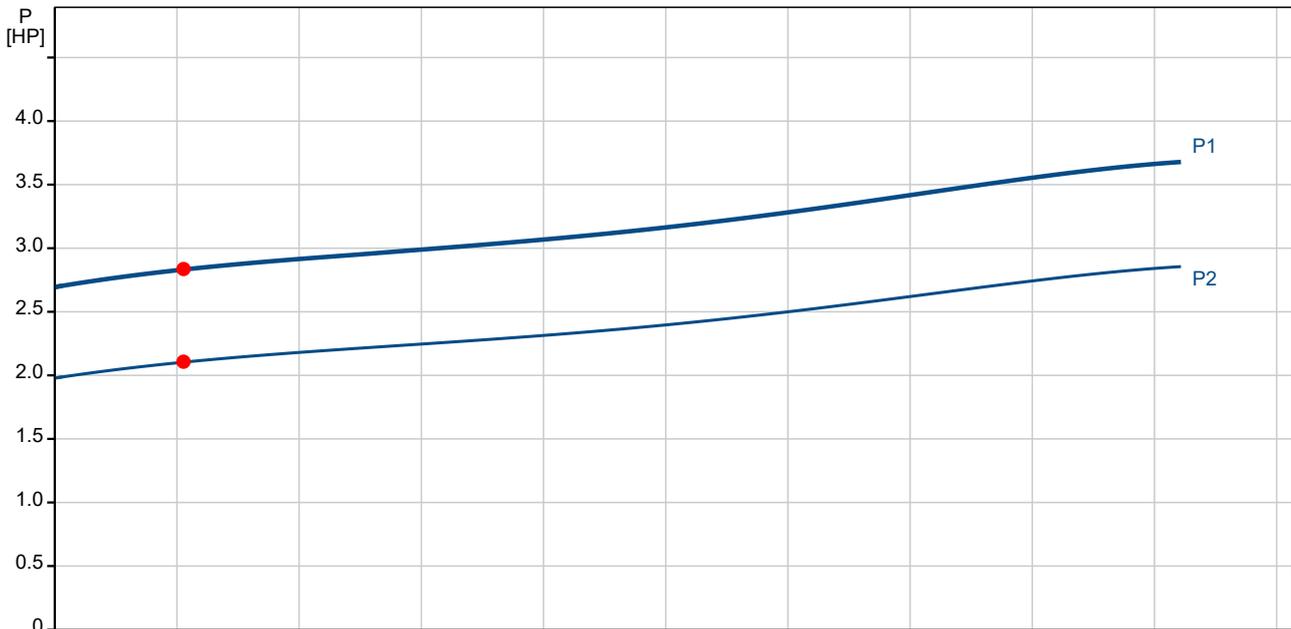
Company name: Grundfos  
Created by:  
Phone:

Date: 5/28/2025

### 98280853 SEG.A15.30.2.60M 60 Hz

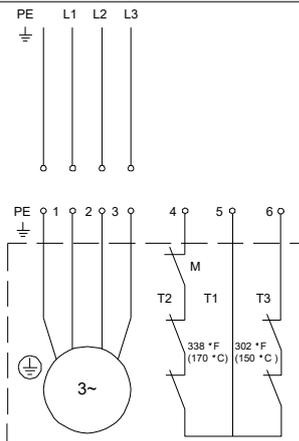
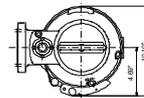
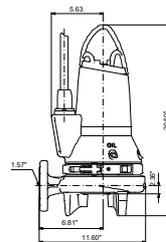
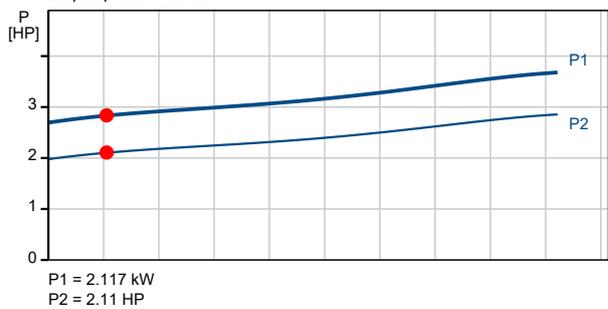
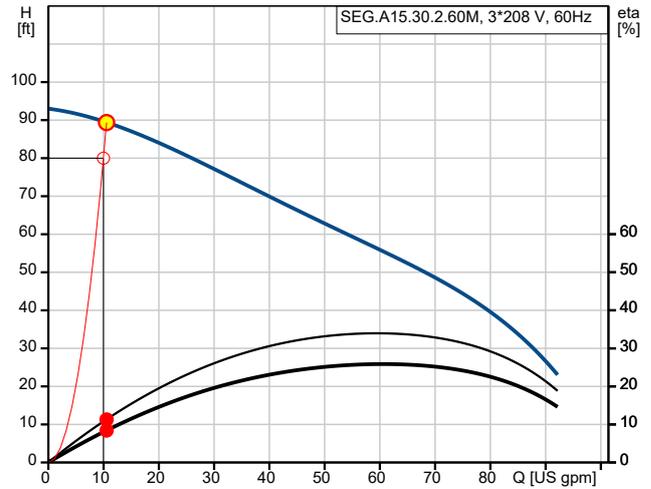


Q = 10.6 US gpm  
H = 89.36 ft  
Liquid temperature during operation = 68 °F  
Eff pump = 11.3 %  
Eff pump+mtr = 8.4 %



P1 = 2.117 kW  
P2 = 2.11 HP

Description	Value
<b>General information:</b>	
Product name:	SEG.A15.30.2.60M
Product No.:	98280853
EAN:	5711492381243
<b>Technical:</b>	
Actual calculated flow:	10.6 US gpm
Max flow:	74.8 US gpm
Resulting head of the pump:	89.36 ft
Head max:	96.13 ft
Type of impeller:	Grinder System
Primary shaft seal:	SIC/SIC
Approvals:	PA-I
Curve tolerance:	ANSI/HI11.6:2017 3B2
<b>Materials:</b>	
Pump housing:	Cast iron
	EN1561 EN-GJL-200
	ASTM ASTM A48 30B
Impeller:	Cast iron
	EN1561 EN-GJL-200
	ASTM ASTM A48 30B
<b>Installation:</b>	
Maximum ambient temperature:	104 °F
Maximum operating pressure:	87.02 psi
Flange standard:	ANSI
Pipework connection:	1 1/2" /2"
Size of outlet port:	1 1/2 inch
Pressure stage:	PN 10
Maximum installation depth:	32.8 ft
Inst dry/wet:	SUBMERGED
Auto-coupling:	98245788
<b>Liquid:</b>	
Liquid temperature range:	32 .. 104 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft <sup>3</sup>
<b>Electrical data:</b>	
Power input - P1:	2.8 kW
Rated power - P2:	3 HP
Main frequency:	60 Hz
Rated voltage:	3 x 200-230 V
Voltage tolerance:	+6/-10 %
Max starts per. hour:	30
Rated current:	10-9 A
Requested voltage:	208 V
Rated current at this voltage:	9.73 A
Starting current:	65 A
Rated current at no load:	4.6 A
Cos phi - power factor:	0.84
Cos phi - p.f. at 3/4 load:	0.81
Cos phi - p.f. at 1/2 load:	0.7
Rated speed:	3500 rpm
Moment of inertia:	0.38 lb ft <sup>2</sup>
Motor efficiency at full load:	78 %
Motor efficiency at 3/4 load:	75 %
Motor efficiency at 1/2 load:	70 %
Number of poles:	2
Start. method:	direct-on-line
Enclosure class (IEC 34-5):	IP68
Insulation class (IEC 85):	F
Explosion proof:	no





Company name: Grundfos

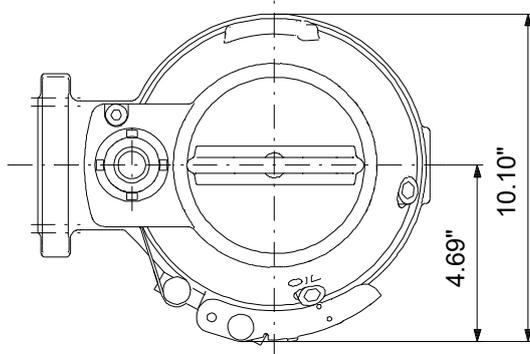
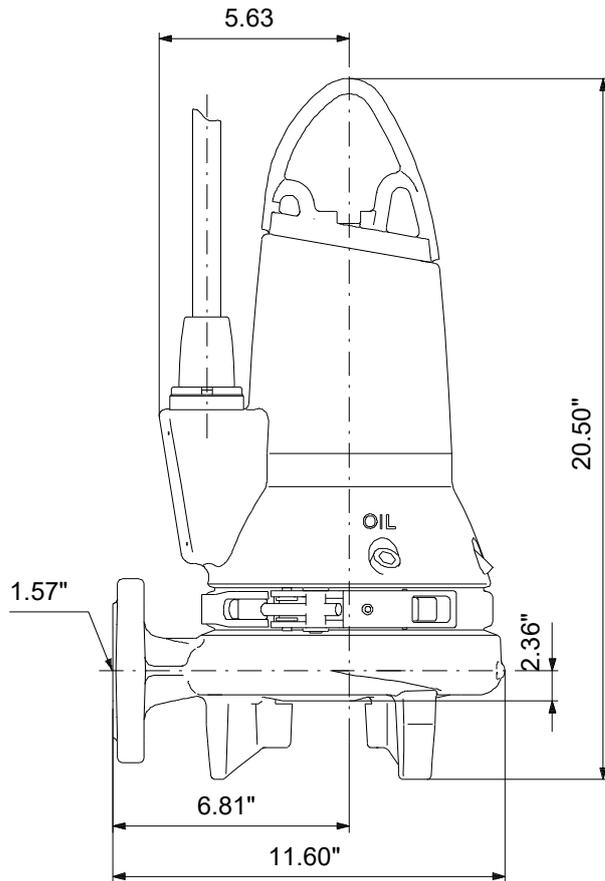
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Phone:

Date: 5/28/2025

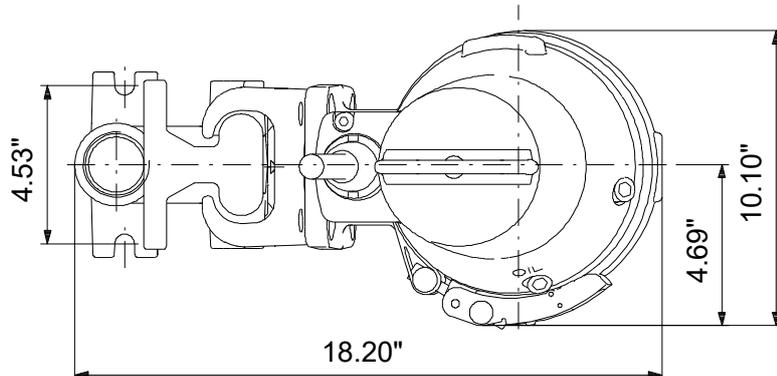
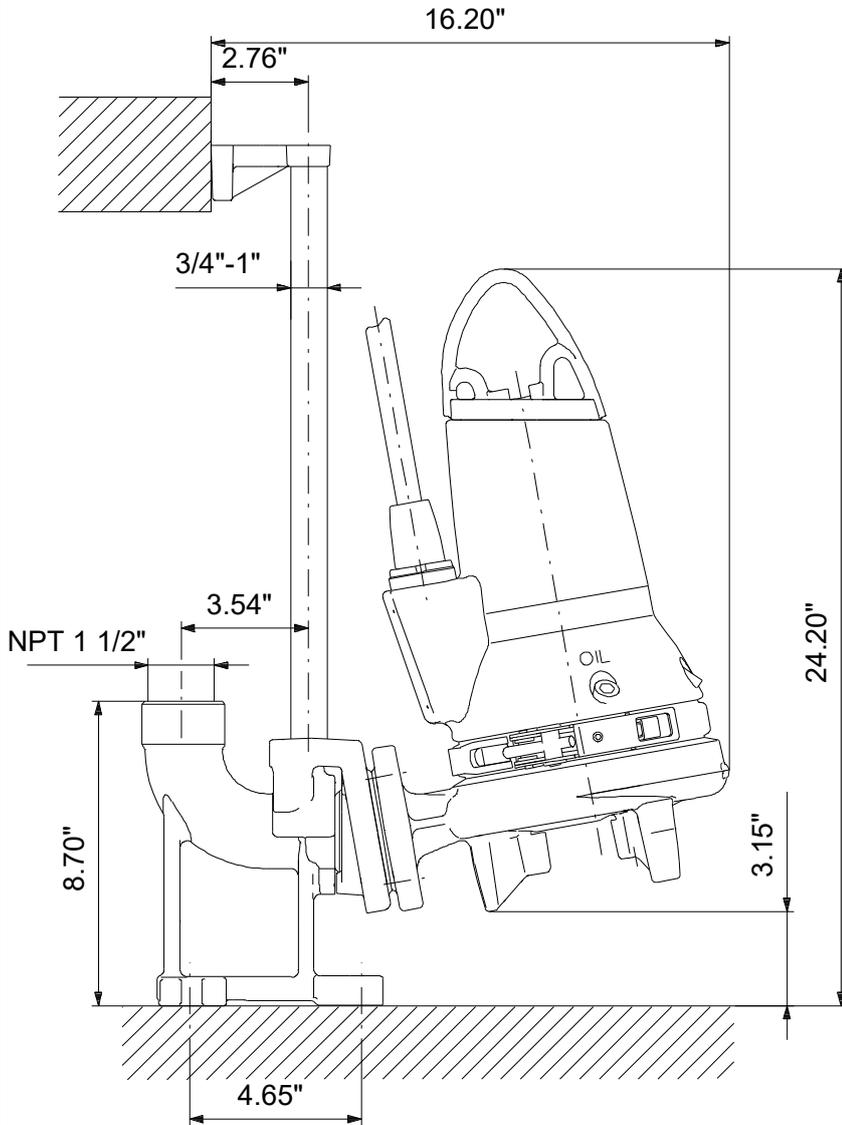
Description	Value
Built-in motor protection:	THERMAL SWITCH
Thermal protec:	external
Length of cable:	33 ft
Cable type:	SEOOW 600V
Type of cable plug:	No plug
<b>Controls:</b>	
Control box:	not included
Additional I/O:	External
Moisture sensor:	with moisture sensors
AUTOADAPT:	No
<b>Others:</b>	
Net weight:	101 lb
Sales region:	NAMREG
Country of origin:	HU
Custom tariff no.:	8413.70.2004

## 98280853 SEG.A15.30.2.60M 60 Hz



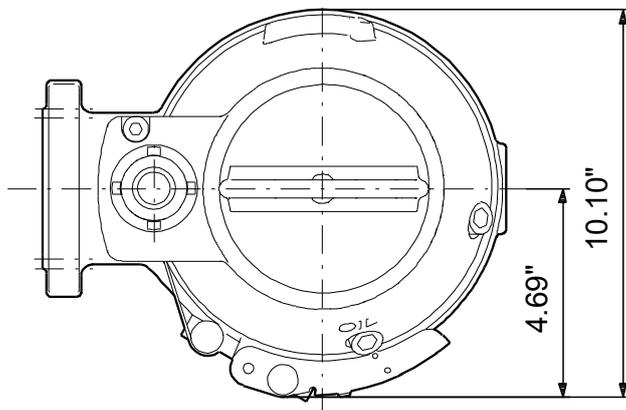
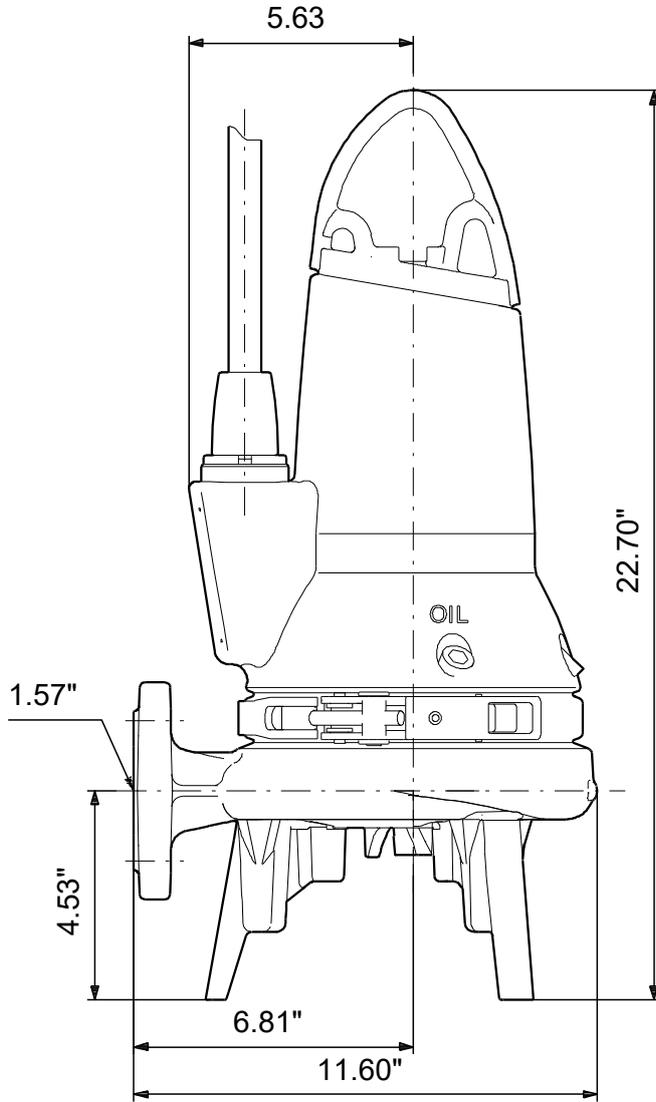
Note! All units are in [in] unless otherwise stated.  
Disclaimer: This simplified dimensional drawing does not show all details.

## 98280853 SEG.A15.30.2.60M 60 Hz



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

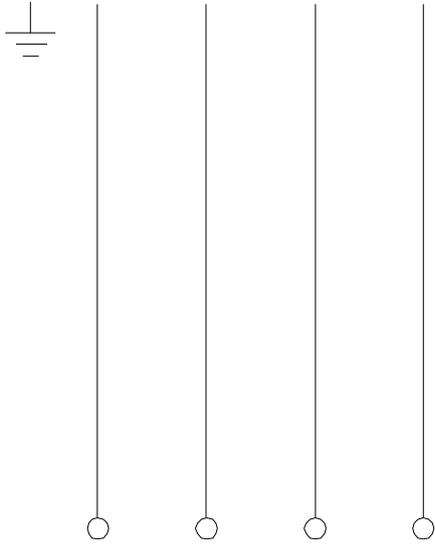
## 98280853 SEG.A15.30.2.60M 60 Hz



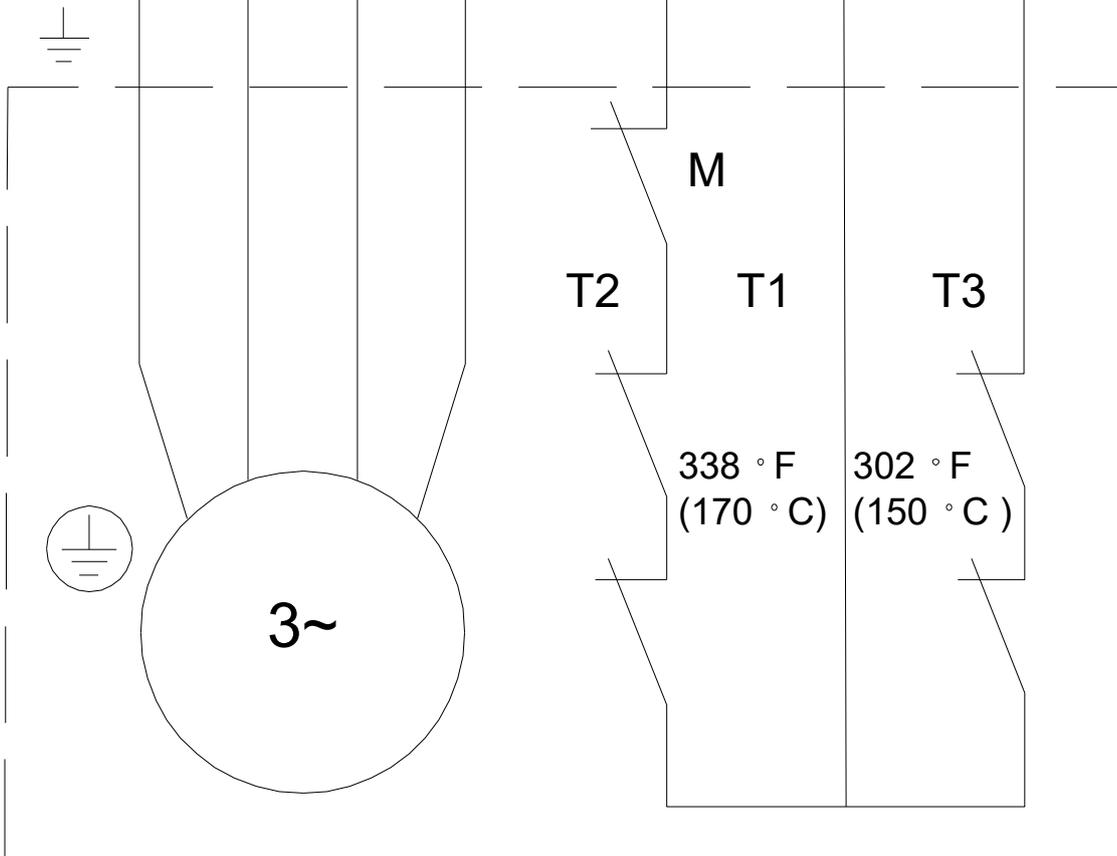
Note! All units are in [in] unless otherwise stated.  
Disclaimer: This simplified dimensional drawing does not show all details.

## 98280853 SEG.A15.30.2.60M 60 Hz

PE L1 L2 L3



PE 1 2 3 4 5 6





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## 98280853 SEG.A15.30.2.60M 60 Hz

### Input

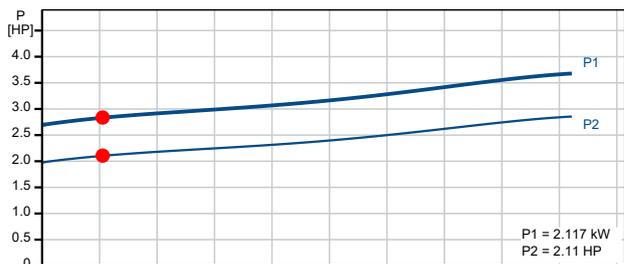
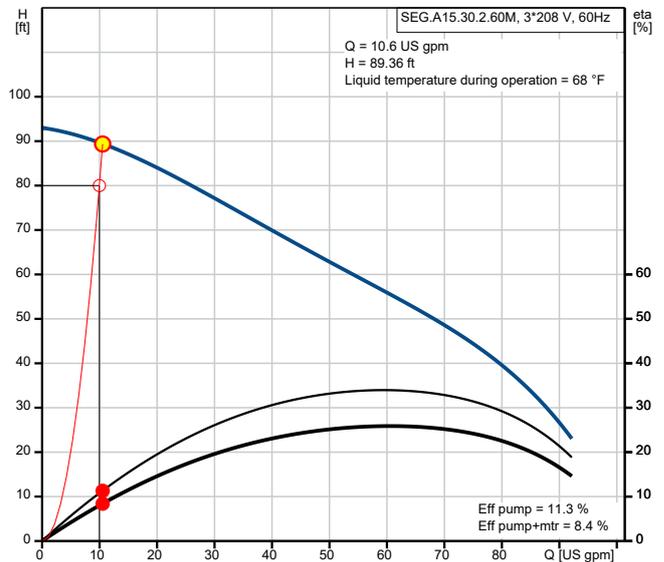
Size by	Pump family
Select pump family	SEG
Journey	Standard
<b>Lifecycle cost calculation</b>	
Load profile	Full load
Pump operating time	1000 h/a
Energy price	0.16 USD/kWh
Increase of energy price	6 %
CO2 emission intensity	1.08 lb/kWh
Calculation period	10 years
How detailed do you want your life cycle cost analysis?	Simple LCC analysis

### Load profile

	1
Flow (%)	100
Time (h/a)	1000

### Sizing result

Flow	10.6	US gpm
Head	89.36	ft
Power P1	2.117	kW
Power P2	2.11	HP
Eff pump	11.3	%
Eff pump+mtr	8.4	% =Eta pump * Eta motor
Consumption	2003	kWh/year
CO2 emission	2160	lb/Year
Price	\$ 4,207.00	
Life cycle cost	\$ 8556	/10Years



## Installation and Input

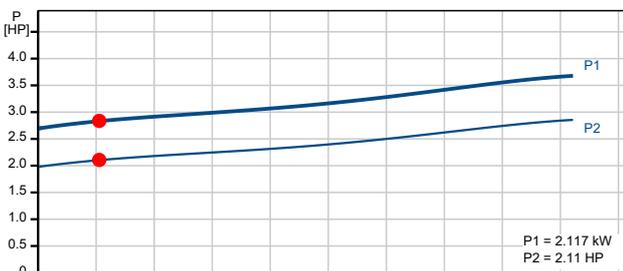
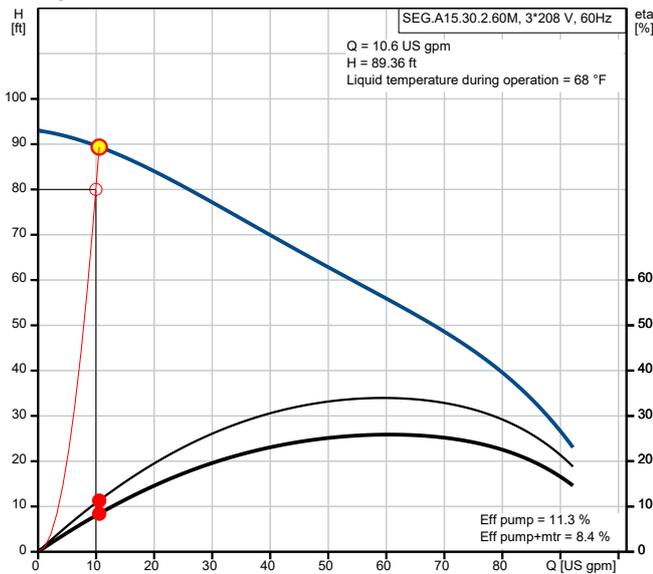
## Sizing results

Product number: 98280853  
 Flow: 10.6 US gpm  
 Head: 89.36 ft  
 Power P1: 2.117 kW  
 Eff pump: 11.3 %  
 Eff pump+mtr: 8.4 % =Eta pump \* Eta motor  
 Consumption: 2003 kWh/year  
 CO2 emission: 2160 lb/Year  
 Price: \$ 4,207.00

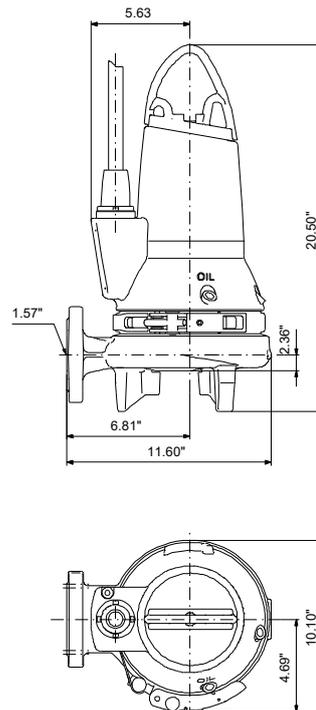
### Load profile

1  
 Flow (%) 100  
 Time (h/a) 1000

## Pump curve



## Dimensional drawing





Company name: Grundfos

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## Installation illustration