

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

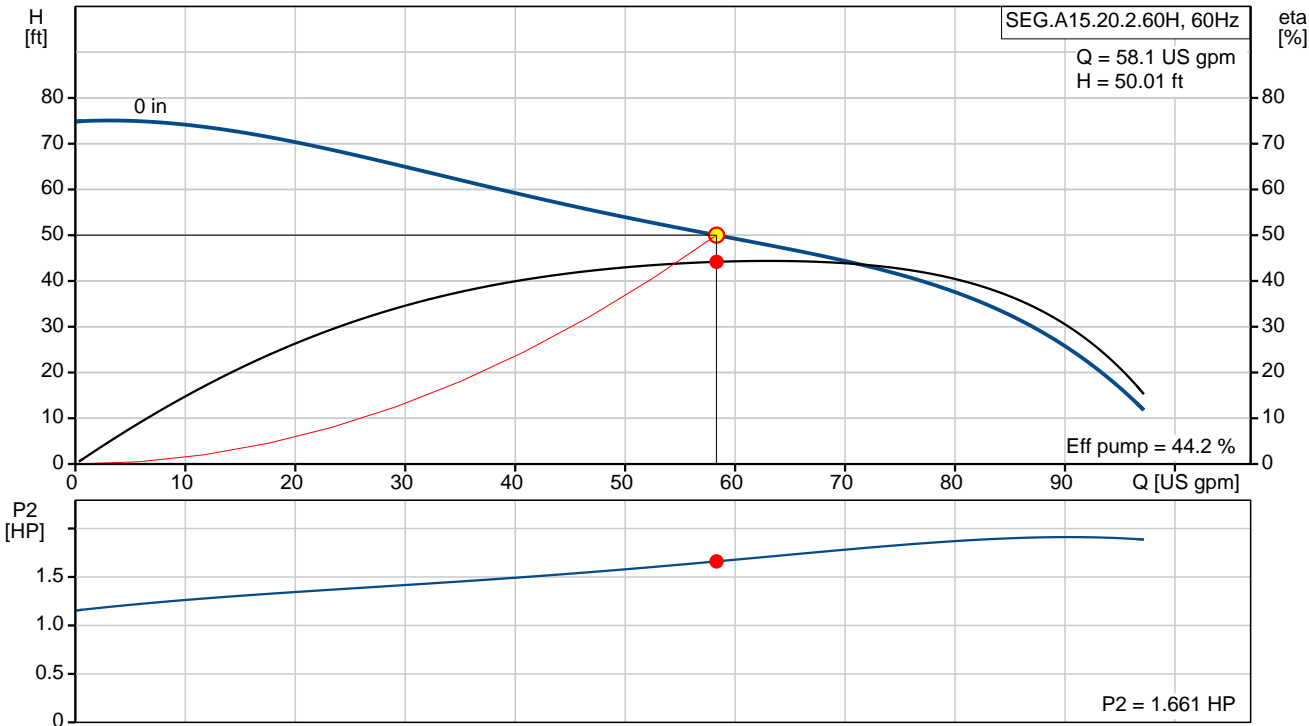


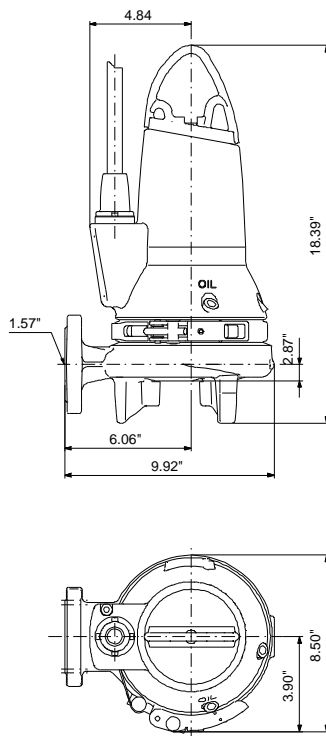
SEG.A15.20.2.60H

Grinder pumps

Product photo could vary from the actual product

Conditions of Service		Pump Data		Motor Data	
Flow:	58.1 US gpm	Maximum operating pressure:	87 psi	Rated voltage:	460 V
Head:	50.01 ft	Liquid temperature range:	32 .. 104 °F	Main frequency:	60 Hz
Efficiency:	_____	Maximum ambient temperature:	104 °F	Number of poles:	2
Liquid:	any viscous fluid	Approvals:	PA-I	Enclosure class:	IP68
Temperature:	_____	Flange standard:	ANSI	Insulation class:	F
NPSH required:	ft	Product number:	98280869	Motor protection:	THERMAL SWITCH
Viscosity:	_____			Thermal protection:	external
Specific Gravity:	1.000				





Materials:

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

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

Tender Text



Product photo could vary from the actual product

Product No.: [98280869](#)

SEG.A15.20.2.60H

Grundfos SEG pumps are submersible pumps with horizontal discharge port, specifically designed for pressurized pumping of wastewater with discharge from toilets.

The SEG pumps are equipped with a grinder system, grinding destructible solids into small pieces so that they can be led away through pipes of a relatively small diameter.

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

The pump is primarily made of cast iron. The clamp securing the motor to the pump housing is made of stainless steel to prevent corrosion and allow for ease of service of the pump.

The power cable of the pump also incorporates wires for the thermal sensors in the motor winding.

The cable connection is a plug solution. The totally sealed plug connection prevents moisture from entering the pump through the cable in case of cable breakage or adverse and/or careless handling of the pump cable.

The pump must be connected to a control box or a controller.

The pump has been tested by CSA.

Controls:

Moisture sensor: with moisture sensors

AUTOADAPT: NO

Liquid:

Pumped liquid: any viscous fluid

Liquid temperature range: 32 .. 104 °F

Density: 62.29 lb/ft³

Technical:

Actual calculated flow: 58.1 US gpm

Resulting head of the pump: 50.01 ft

Type of impeller: Grinder System

Primary shaft seal: SIC/SIC

Secondary shaft seal: LIPSEAL

Approvals on nameplate: PA-I

Curve tolerance: ANSI/HI11.6:2012 3B2

Materials:

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

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

Installation:


Maximum ambient temperature: 104 °F
Maximum operating pressure: 87 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: 32.81 ft
Auto-coupling: 98245788

Electrical data:

Power input - P1: 1.9 kW
Rated power - P2: 2 HP
Main frequency: 60 Hz
Rated voltage: 3 x 460 V
Voltage tolerance: +6/-10 %
Max starts per. hour: 30
Rated current: 4 A
Starting current: 20 A
Rated current at no load: 1.6 A
Cos phi - power factor: 0,8
Cos phi - p.f. at 3/4 load: 0,75
Cos phi - p.f. at 1/2 load: 0,7
Rated speed: 3405 rpm
Moment of inertia: 0.047 lb ft²
Motor efficiency at full load: 0.78 %
Motor efficiency at 3/4 load: 0.76 %
Motor efficiency at 1/2 load: 0.7 %
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

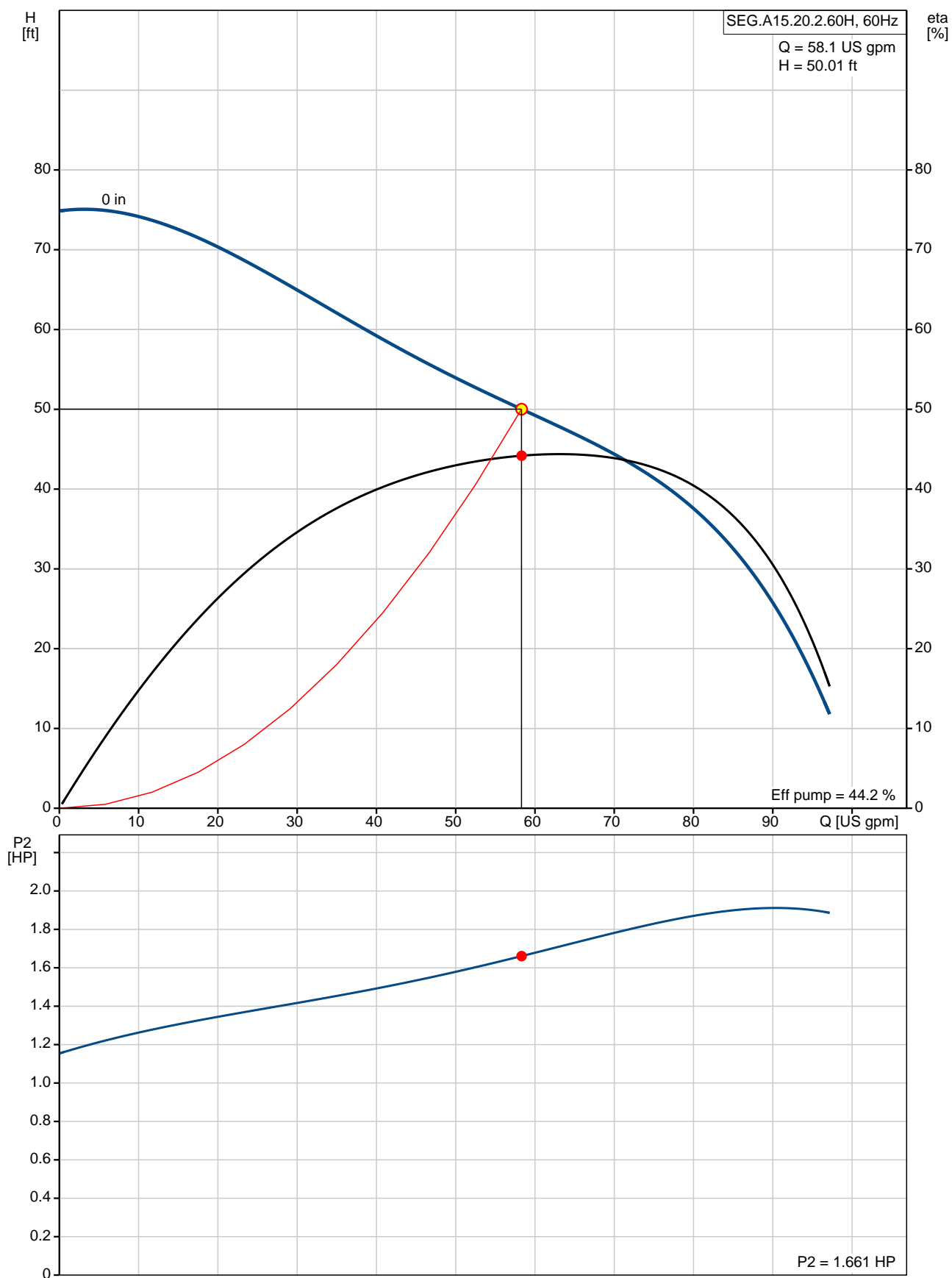
Others:

Net weight: 101 lb

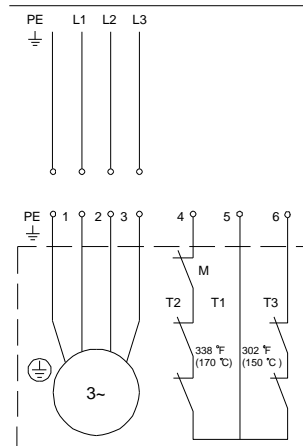
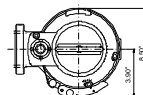
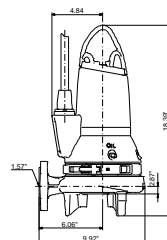
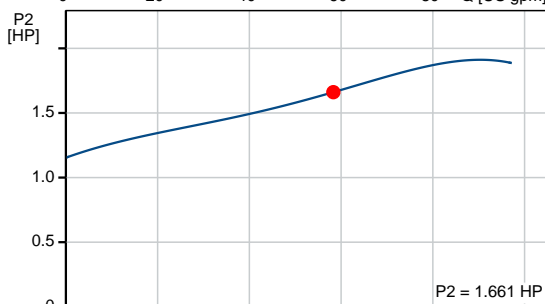
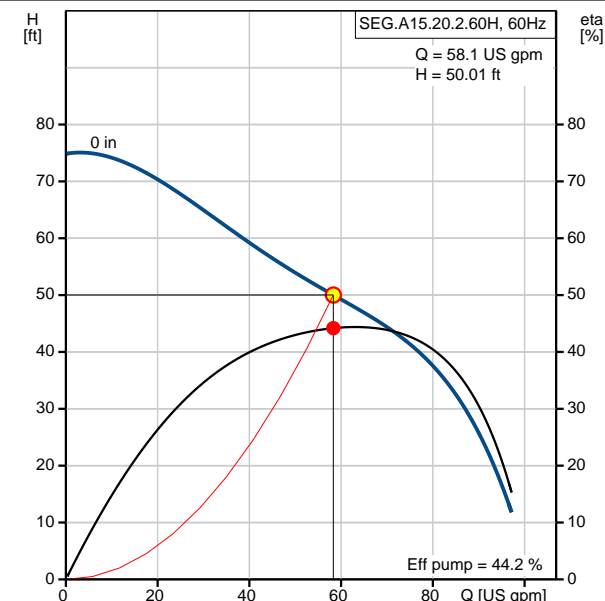
Position	Count	Description																												
	1	<div><div></div><div>Product photo could vary from the actual product</div></div> <p>Product No.: 98280869</p> <p>Grundfos SEG pumps are submersible pumps with horizontal discharge port, specifically designed for pressurized pumping of wastewater with discharge from toilets.</p> <p>The SEG pumps are equipped with a grinder system, grinding destructible solids into small pieces so that they can be led away through pipes of a relatively small diameter.</p> <p>The surface of the pump is smooth to prevent dirt and impurities from sticking to the pump.</p> <p>The pump is primarily made of cast iron. The clamp securing the motor to the pump housing is made of stainless steel to prevent corrosion and allow for ease of service of the pump.</p> <p>The power cable of the pump also incorporates wires for the thermal sensors in the motor winding. The cable connection is a plug solution. The totally sealed plug connection prevents moisture from entering the pump through the cable in case of cable breakage or adverse and/or careless handling of the pump cable.</p> <p>The pump must be connected to a control box or a controller.</p> <p>The pump has been tested by CSA.</p> <p>Controls:</p> <table><tr><td>Moisture sensor:</td><td>with moisture sensors</td></tr><tr><td>AUTOADAPT:</td><td>NO</td></tr></table> <p>Liquid:</p> <table><tr><td>Pumped liquid:</td><td>any viscous fluid</td></tr><tr><td>Liquid temperature range:</td><td>32 .. 104 °F</td></tr><tr><td>Density:</td><td>62.29 lb/ft³</td></tr></table> <p>Technical:</p> <table><tr><td>Actual calculated flow:</td><td>58.1 US gpm</td></tr><tr><td>Resulting head of the pump:</td><td>50.01 ft</td></tr><tr><td>Type of impeller:</td><td>Grinder System</td></tr><tr><td>Primary shaft seal:</td><td>SIC/SIC</td></tr><tr><td>Secondary shaft seal:</td><td>LIPSEAL</td></tr><tr><td>Approvals on nameplate:</td><td>PA-I</td></tr><tr><td>Curve tolerance:</td><td>ANSI/HI11.6:2012 3B2</td></tr></table> <p>Materials:</p> <table><tr><td>Pump housing:</td><td>Cast iron EN1561 EN-GJL-200 ASTM A48 30B</td></tr><tr><td>Impeller:</td><td>Cast iron</td></tr></table>	Moisture sensor:	with moisture sensors	AUTOADAPT:	NO	Pumped liquid:	any viscous fluid	Liquid temperature range:	32 .. 104 °F	Density:	62.29 lb/ft³	Actual calculated flow:	58.1 US gpm	Resulting head of the pump:	50.01 ft	Type of impeller:	Grinder System	Primary shaft seal:	SIC/SIC	Secondary shaft seal:	LIPSEAL	Approvals on nameplate:	PA-I	Curve tolerance:	ANSI/HI11.6:2012 3B2	Pump housing:	Cast iron EN1561 EN-GJL-200 ASTM A48 30B	Impeller:	Cast iron
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Impeller:	Cast iron																													

Position	Count	Description
		<p>EN1561 EN-GJL-200 ASTM A48 30B</p> <p>Installation: Maximum ambient temperature: 104 °F Maximum operating pressure: 87 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: 32.81 ft Auto-coupling: 98245788</p> <p>Electrical data: Power input - P1: 1.9 kW Rated power - P2: 2 HP Main frequency: 60 Hz Rated voltage: 3 x 460 V Voltage tolerance: +6/-10 % Max starts per. hour: 30 Rated current: 4 A Starting current: 20 A Rated current at no load: 1.6 A Cos phi - power factor: 0,8 Cos phi - p.f. at 3/4 load: 0,75 Cos phi - p.f. at 1/2 load: 0,7 Rated speed: 3405 rpm Moment of inertia: 0.047 lb ft² Motor efficiency at full load: 0.78 % Motor efficiency at 3/4 load: 0.76 % Motor efficiency at 1/2 load: 0.7 % 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</p>

98280869 SEG.A15.20.2.60H 60 Hz



Description	Value
General information:	
Product name:	SEG.A15.20.2.60H
Product No.:	98280869
EAN:	5711492381441
Technical:	
Actual calculated flow:	58.1 US gpm
Max flow:	96.9 US gpm
Resulting head of the pump:	50.01 ft
Head max:	74.81 ft
Type of impeller:	Grinder System
Primary shaft seal:	SIC/SIC
Secondary shaft seal:	LIPSEAL
Approvals on nameplate:	PA-I
Curve tolerance:	ANSI/HI11.6:2012 3B2
Materials:	
Pump housing:	Cast iron
	EN1561 EN-GJL-200
	ASTM A48 30B
Impeller:	Cast iron
	EN1561 EN-GJL-200
	ASTM A48 30B
Installation:	
Maximum ambient temperature:	104 °F
Maximum operating pressure:	87 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:	32.81 ft
Inst dry/wet:	SUBMERGED
Auto-coupling:	98245788
Liquid:	
Pumped liquid:	any viscous fluid
Liquid temperature range:	32 .. 104 °F
Density:	62.29 lb/ft ³
Electrical data:	
Power input - P1:	1.9 kW
Rated power - P2:	2 HP
Main frequency:	60 Hz
Rated voltage:	3 x 460 V
Voltage tolerance:	+6/-10 %
Max starts per. hour:	30
Rated current:	4 A
Starting current:	20 A
Rated current at no load:	1.6 A
Cos phi - power factor:	0,8
Cos phi - p.f. at 3/4 load:	0,75
Cos phi - p.f. at 1/2 load:	0,7
Rated speed:	3405 rpm
Moment of inertia:	0.047 lb ft ²
Motor efficiency at full load:	0.78 %
Motor efficiency at 3/4 load:	0.76 %
Motor efficiency at 1/2 load:	0.7 %
Number of poles:	2





Company name:

Created by:

Phone:

Date:

2/22/2018

Description	Value
Start. method:	direct-on-line
Enclosure class (IEC 34-5):	IP68
Insulation class (IEC 85):	F
Explosion proof:	no
Motor protection:	THERMAL SWITCH
Thermal protec:	external
Length of cable:	33 ft
Cable type:	SEOOW 600V
Type of cable plug:	NO PLUG

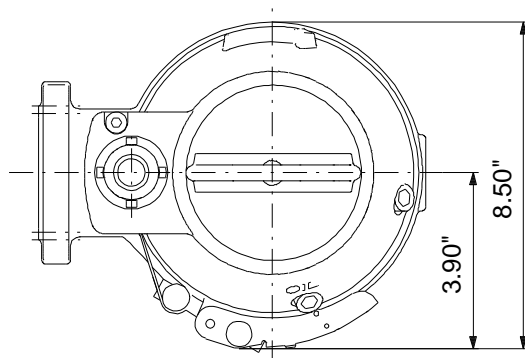
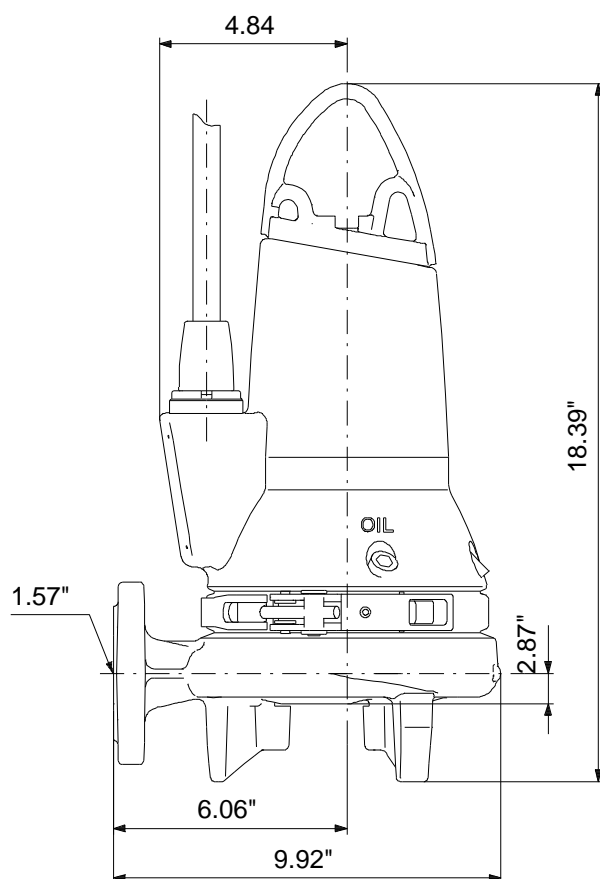
Controls:

Control box:	not included
Additional I/O:	External
Moisture sensor:	with moisture sensors
AUTOADAPT:	NO

Others:

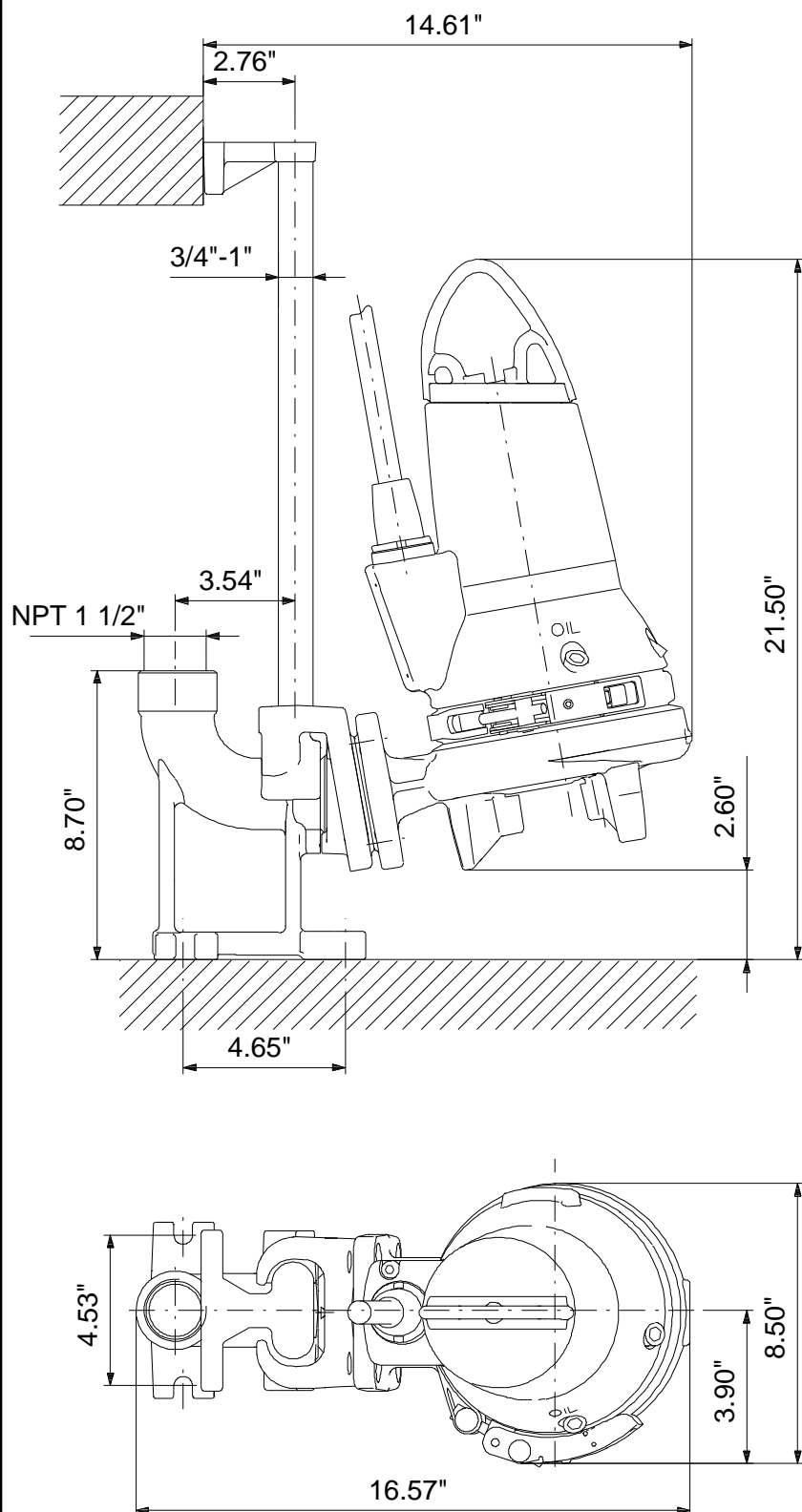
Net weight:	101 lb
Sales region:	Namreg

98280869 SEG.A15.20.2.60H 60 Hz



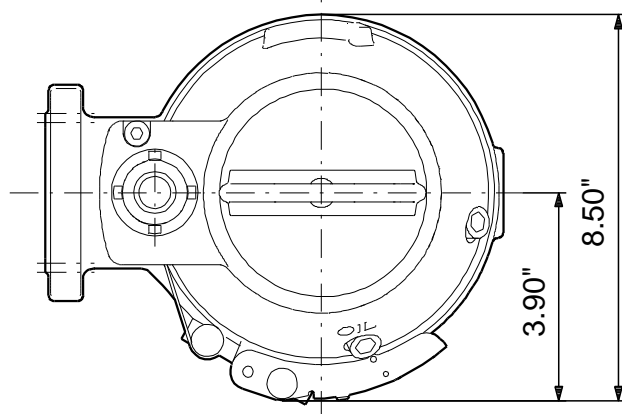
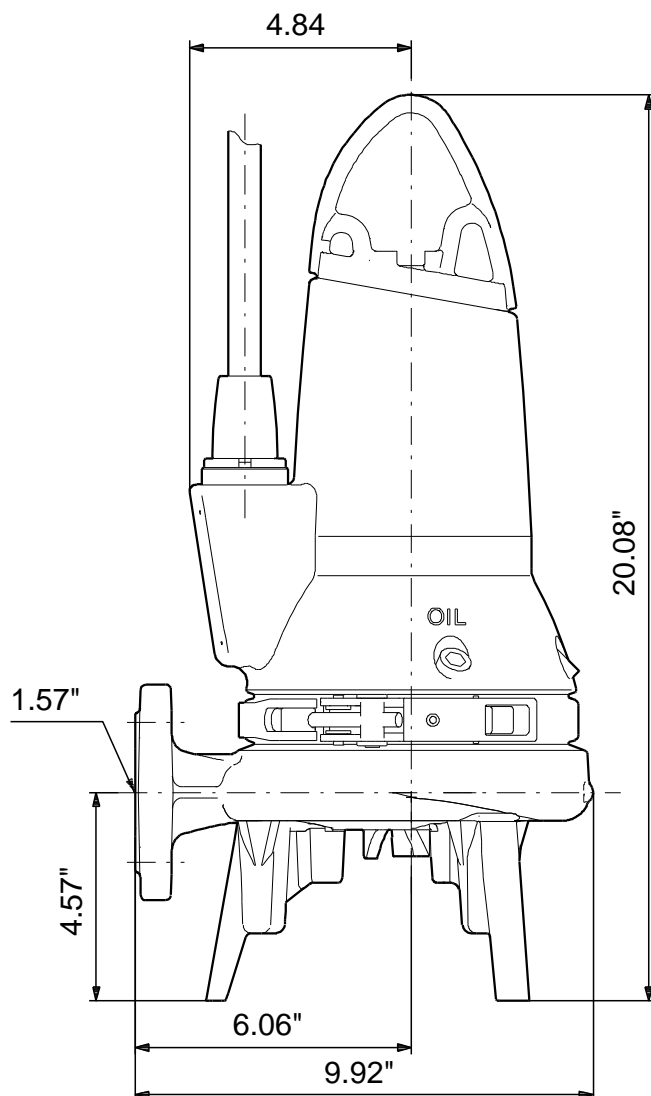
Note! All units are in [mm] unless otherwise stated.
Disclaimer: This simplified dimensional drawing does not show all details.

98280869 SEG.A15.20.2.60H 60 Hz



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

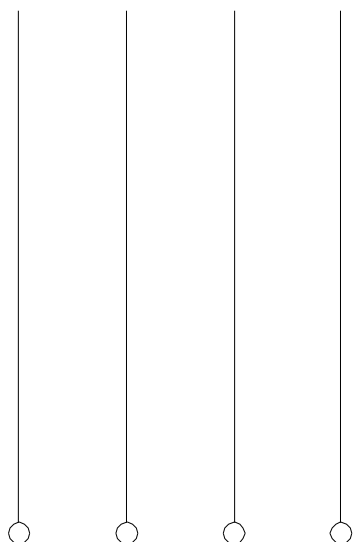
98280869 SEG.A15.20.2.60H 60 Hz



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

98280869 SEG.A15.20.2.60H 60 Hz

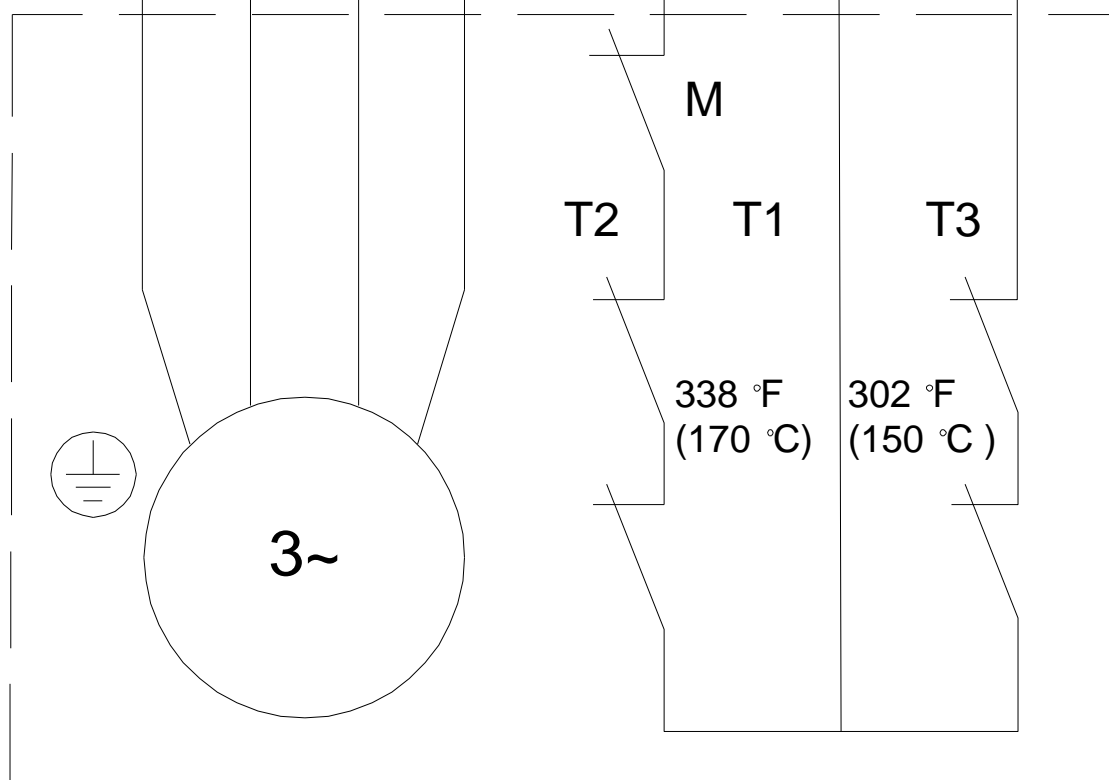
PE L1 L2 L3



PE



1 2 3 4 5 6



All units are [mm] unless otherwise presented.



Company name:

Created by:

Phone:

Date:

2/22/2018

Order Data:

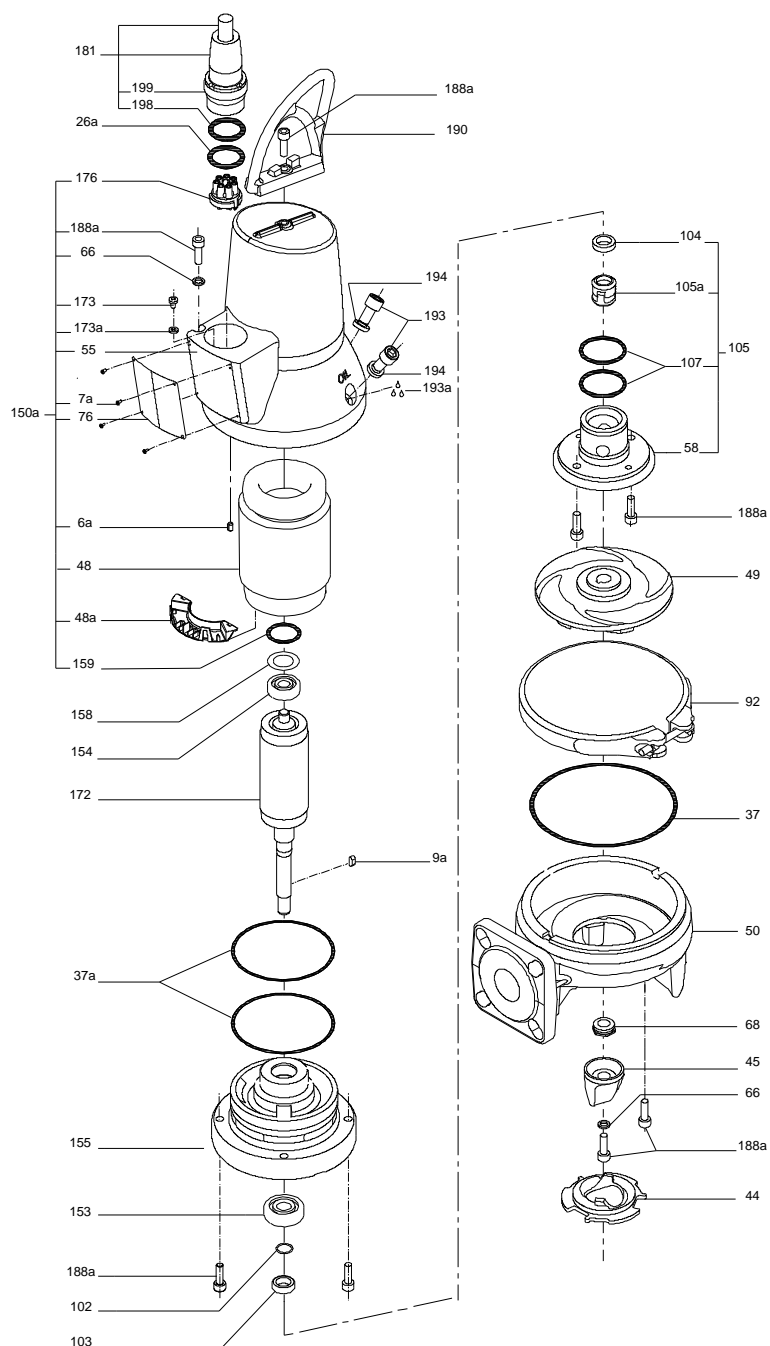
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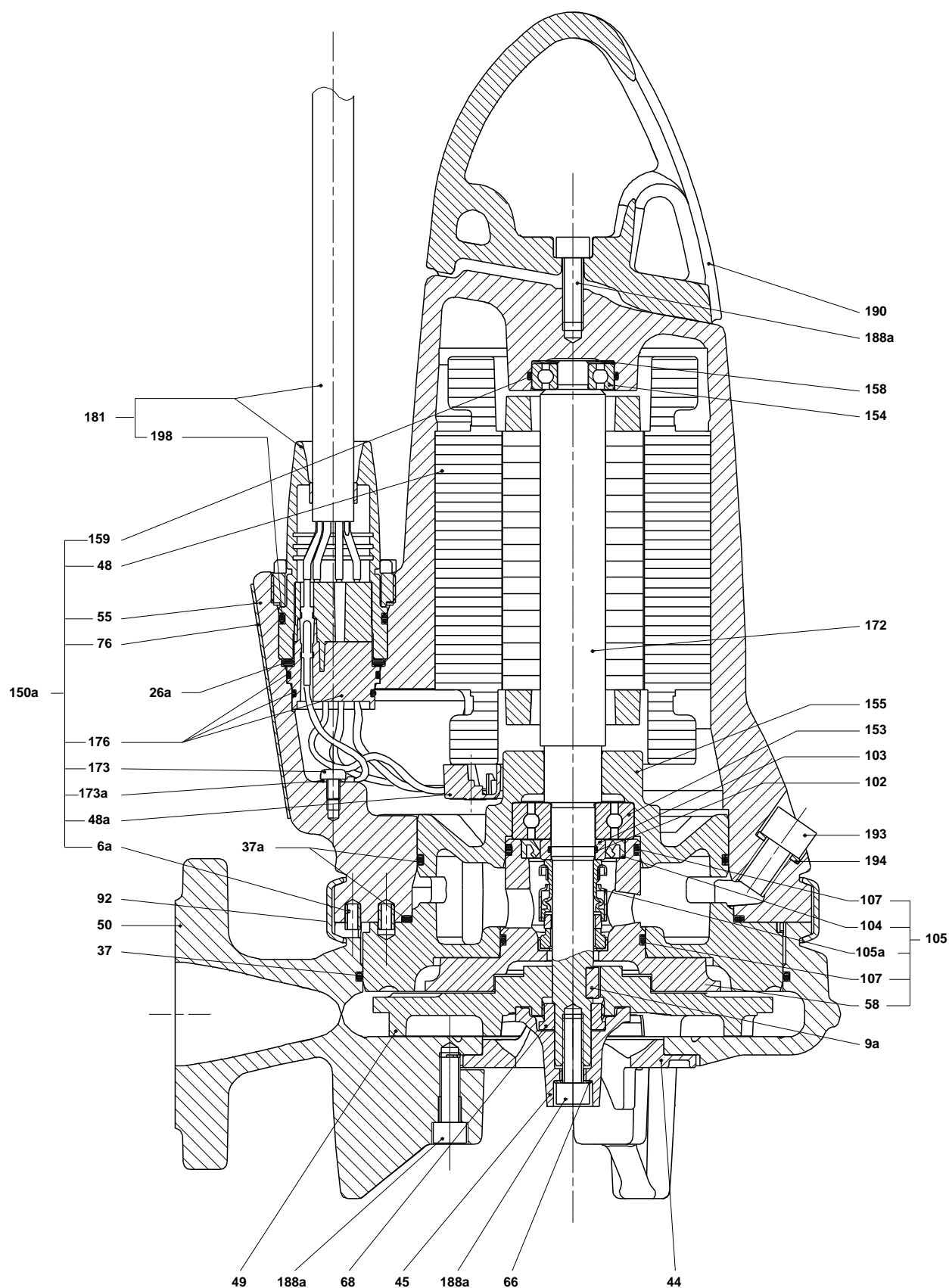
Product No.: 98280869

Total: Price on request

Exploded view (TM065739 SEG 0.9-1.5KW)



Sectional drawing (tm025378 0303)



Parts list SEG.A15.20.2.60H, Prod number 98280869

Valid from 5.5.2014 (1419)

Position	Description	Annotation	Classification data	Part No.	Count	Unit
	Grease				10	G
6a	Pin				1	pcs
7a	Rivet				4	pcs
9a	Key		Dimension: 5X5X12		1	pcs
26.a	O-ring		Diameter: 32		1	pcs
			Material type: NBR			
			Thickness: 4			
37	O-ring		Diameter: 164		1	pcs
			Material type: NBR			
			Thickness: 3			
37a	O-ring		Diameter: 114		2	pcs
			Material type: NBR			
			Thickness: 3			
44	Grinder ring				1	pcs
45	Grinder head				1	pcs
49	Impeller				1	pcs
50	Pump housing				1	pcs
58	Retainer for seal ring				1	pcs
66	Wedge lock washer		Designation: M8 A4		1	pcs
68	Adjustment nut				1	pcs
76	Nameplate				1	pcs
- 92	Strap cpl.				1	pcs
	Strap				1	
1	Lock nut		Thread: M8		1	
92a	Hex socket head cap screw				1	
102	O-ring		Diameter: 16		1	pcs
			Material type: NBR			
			Thickness: 1.5			
103	Bush				1	pcs
104	Seal ring				1	pcs
105	Shaft seal		Material type: BQQP		1	pcs
107	O-ring		Diameter: 47		1	pcs
			Material type: NBR			
			Thickness: 3			
108	O-ring		Diameter: 50		1	pcs
			Material type: NBR			
			Thickness: 3			
- 150a	Stator w/housing cpl.				1	pcs
48	Stator				1	
48a	Cover				1	
55	Stator housing				1	
159	O-ring				1	
173	Cross recess Pan head screw		Designation: CROSS-HEAD SCREW		1	
173a	Lock washer				1	
- 176	Plug				1	
	Pin					
153b	O-ring		Diameter: 28			
			Material type: NBR			
			Thickness: 2			
185	O-ring		Diameter: 31			
			Material type: NBR			
			Thickness: 2			
153	Ball bearing		Designation: 6303 2RS C3 SYN		1	pcs



Company name:

Created by:

Phone:

Date:

2/22/2018

Position	Description	Annotation	Classification data	Part No.	Count	Unit
154	Ball bearing				1	pcs
155	Oil chamber				1	pcs
158	Waved washer				1	pcs
172	Shaft w/rotor				1	pcs
- 181	Cable				1	pcs
198	O-ring		Diameter: 34.2		1	
			Material type: NBR			
			Thickness: 3			
188.a	Hex socket head cap screw		Length: 25		9	pcs
			Thread: M8			
190	Lifting bracket				1	pcs
193	Hex socket head cap screw		Designation: A2-70		2	pcs
			Length: 20			
			Thread: M12			
194	Washer		Inner diameter: 19		2	pcs
			Outer diameter: 12.2			
			Thickness: 4.4			