

INSTALLATION AND OPERATOR'S MANUAL

Submersible Grinder Pumps

293 Wright St., Delavan, WI 53115

Phone:	1-800-642-5930
Fax:	1-800-426-9446
Web Site:	jungpumpen-us.com



Installation/Operation/Parts

For further operating, installation, or maintenance assistance:

Call 1-800-642-5930

Safety

Contents

Important Safety Instructions
Installation
Electrical
Control Panels 5
Operation
Maintenance
Lubrication
Repair Parts
Troubleshooting
Product Specifications
Warranty

Important Safety Instructions

SAVE THESE INSTRUCTIONS - This manual contains important instructions that should be followed during installation, operation, and maintenance of the product. Save this manual for future reference.

This is the safety alert symbol. When you see this symbol on your pump or in this manual, look for one of the following signal words and be alert to the potential for personal injury!

ADANGER indicates a hazard which, if not avoided, *will* result in death or serious injury.

WARNING indicates a hazard which, if not avoided, could result in death or serious injury.

A CAUTION indicates a hazard which, if not avoided, could result in minor or moderate injury.

NOTICE addresses practices not related to personal injury.

The manufacturer cannot anticipate every possible circumstance that might involve a hazard. The warnings in this manual, and the tags and decals affixed to the unit are, therefore, not all-inclusive. If you use a procedure or operating technique that the manufacturer does not specifically recommend, you must satisfy yourself that it is safe for you and others. You must also make sure that the procedure or operating technique that you choose does not render the system unsafe.

Electrically powered sewage pumps normally give many years of trouble-free service when correctly installed, maintained, and used. However, unusual circumstances (interruption of power to the pump, large solids in the sump, flooding that exceeds the pump's capacity, electrical or mechanical failure in the pump, etc.) may prevent your pump from functioning normally. To prevent possible damage, consult your dealer about installing a secondary sewage pump or a high water alarm. See *Troubleshooting* in this manual for information about common sewage pump problems and remedies. For more information, see your retailer, call Jung Pumpen customer service at 1-800-642-5930 or visit our web site at jungpumpen-us.com.

A WARNING Hazardous voltage - risk of electrical shock. Shock can cause serious injury or death. Failure to follow the warnings below can result in fatal electric shock.

AWARNING Hazardous voltage - risk of electrical shock: During operation the pump is in water:

- Check your local codes before installing. You must comply with their rules. Only qualified personnel should install the pump and associated control equipment.
- Ground the pump according to all applicable codes and ordinances.
- Take care when changing fuses or resetting the circuit breaker. Disconnect power to the pump before servicing. Do not stand in water when working on the control box or with the circuit breaker panel.
- This pump is intended for permanent connection only. Do not connect conduit to pump. Provide a strain relief at the control box for the power supply cord connection to box. All control components must be UL or CSA listed and suitable for end use application.
- Do not remove cord or strain relief. Do not lift the pump by the power cord (See 'Cord Lift Warning').

Safety • Installation

AWARNING Burn Hazard. Modern motors can operate at high temperatures. To avoid burns when servicing the pump, allow it to cool for 20 minutes after shut-down before handling it.

A WARNING Risk of explosion and hazardous gas.

Septic system must be vented in accordance with local plumbing codes.

- Do not smoke or use sparkable electrical devices or flame in a septic (gaseous) or possible septic sump.
- If a septic sump condition exists and if entry into sump is necessary, then (1) provide proper safety precautions per OSHA requirements and (2) do not enter sump until these precautions are strictly adhered to.
- Do not install the pump in any location classified as hazardous by National Electrical Code, ANSI/NFPA 70-1984.

Wear safety glasses at all times when working with the pump.

Do not run the pump dry. Dry running can overheat the pump and will void the warranty.

The pump requires periodic maintenance. Check the oil level and for water in the oil, as described in *Maintenance*.

Provide a means of pressure relief for pumps whose discharge line can be shut-off or obstructed.

The pump is frost-resistant to $-4^{\circ}F$ ($-20^{\circ}C$) when stored in dry conditions. It must not be allowed to freeze in water after installation.

Installation

Handle with care. Check the items received against the packing list to be sure that all equipment has been received. Inspect the pump for shipping damage. If any is found, file a claim with the carrier immediately.

Thank you for purchasing this Jung Pumpen product. To help ensure years of trouble-free operation, please read the manual carefully. This pump may be installed on an optional guide-rail liftout system for ease of inspection and service. Otherwise, install the pump on a hard, level (cement, asphalt, etc.) surface. Never place the pump directly on earth, clay, sand, or gravel surfaces. An optional leg kit is available. The basin or pit must be at least 24" (60 cm) in diameter and 30" (76 cm) deep. Reduce the number of bends in the discharge piping to keep the outlet flow as smooth as possible. Full dimensional information is found in *Product Specifications*.

Install the pump as a free-standing unit, with a pipe union in the discharge piping to allow removal for servicing. Figure 1 depicts a typical sewage pump in an ordinary pit.



Figure 1: Typical free-standing installation

The discharge piping must not be smaller than the pump discharge. The pump must always be lifted by the lift-out chain or cable and never by the power supply cable. See *Cord Lift Warning*.



Cord Lift Warning

For parts or assistance, call Jung Pumpen Customer Service at 1-800-642-5930

Mounting the pump on guide rails permits easy inspection and service in permanent installations. Use the installation instructions supplied with the guide rail lift-out system. Place the pump opposite the influent opening to prevent stagnant areas where solids can settle. See Figure 2.



Figure 2: Typical installation with guide rail system for permanent locations.

Electrical

A WARNING Hazardous voltage. Can shock, burn, start a fire, or kill. When installing, operating, or servicing this pump, follow electrical safety instructions. Only trained service personnel should install or service this pump.

- 1. DO NOT splice the power cord and never lay the cable ends in water.
- 2. DO NOT handle or service the pump while it is connected to the power supply.
- 3. DO NOT operate the pump unless it is properly grounded. Wire the pump directly into a grounded terminal block in an automatic float or pump controller box for automatic operation. Connect the pump according to all applicable codes. For continuous operation, wire the pump directly into the switch box.
- 4. Incorrect voltage can cause a fire or seriously damage the motor and voids the warranty. Make sure that the frequency and voltage shown on the nameplate corresponds to the frequency and voltage of the electrical supply. The supply voltage must be within + 10% of the nameplate voltage. If in doubt consult a licensed electrician.

5. Connect the pump to its own dedicated circuit with no other load on the circuit. Figures 3, 4 & 5 show single and three phase wiring schemes.



Figure 3: Single phase wiring diagram



Figure 4: Three phase star configuration wiring diagram



Figure 5: Three phase delta configuration wiring diagram

- 6. Use a control panel sized to match the pump. Refer to control panel installation instructions for wiring connection information.
- 7. Install the pump in accordance with all electrical codes that apply. Install a fused disconnect switch or circuit breaker in accordance with local codes.
- 8. Any alterations to internal pump circuitry must be made using crimp connectors and professional tools.
- 9. The pump rotation must be clockwise (viewed from the top of the pump). NEVER operate the pump in reverse.

If a three phase unit runs backwards, interchange two of the three power supply wires to reverse the motor's direction of rotation.

Control Panels

AWARNING Risk of electric shock. Ground pump and motor before connecting controls or power supply. Adhere to local electrical codes governing pump and control installations.

A control panel is not included with the pump. Install a simplex or duplex control panel (purchase separately) for proper pump operation. Single phase pumps require a start package, as shown in *Product Specifications*. A full range of controls and switches are available from your dealer.

If a Jung Pumpen control panel is not used, install a control panel with circuit breaker or fused disconnect as required by local code. Use magnetic starters with ambient compensated overload protection. Three phase units require three line protection; single phase units require only one line protection. Inadequate protection voids the warranty.

Control Panel Overload Adjustment – Three Phase

NOTICE: See your control panel installation and operating instructions before adjusting overload setting. Set the overload protective device to the nameplate full load current.

Size the overload protective device so that the trip current is 115% of the nameplate full load current.

Operation

AWARNING Hazardous cutter and possible unexpected starts. Rotation of the cutter with hands in the cutter area can cause loss of fingers. Disconnect the electrical power and keep your hands away from the pump inlet opening when working on or handling the pump for any reason. Do not use automatic reset controls with this pump. Single phase units have an automatic overload protector in the motor which will protect the motor from burning out due to overheating/overloading. When the motor cools down, the overload protector will automatically reset and start the motor. This can happen at any time. Three phase units require external overload protection. If the overload trips frequently, check for the cause. It could be:

- stuck impeller
- wrong/low voltage
- bad thermal overload protector
- electrical failure in the motor. If the motor has electrically failed, replace the pump.

Grinder Assembly: The grinder unit consists of a cutting rotor and a cutting plate. Persistent jamming and clogging of the pump indicates dull or worn grinder parts. If either the cutting rotor or plate is dull, replace both.

NOTICE: Normal domestic sewage will cause very little dulling or wear of the pump parts. However, pumping abrasives (such as fine sand) will increase wear and tear and may make it necessary to replace the grinder assembly frequently.

The pump is not equipped with thermostats or a leak sensor probe. Check the seal chamber oil condition quarterly in heavy duty service or annually in light duty service.

NOTICE: Failure to monitor the oil condition voids the warranty. Motors damaged by flooding of the motor cavity due to seal or O-Ring failure may not be covered under warranty.

Verify the capacity of the pump by checking the discharge. Verify that the pump is free from any vibration and noise.

To avoid overheating the motor for continuous operation, the pump must be completely submerged in liquid. Set the level switches to maintain this submerged condition. Do not allow the pump to run in a dry sump. It will void the warranty and may damage the pump.

Maintenance

Only qualified mechanics with proper tools and knowledge should attempt to service this pump.

AWARNING Heavy parts. Use lifting gear of appropriate capacity positioned directly over lift point(s).

Seal Lubrication

Oil in the seal chamber should be changed after the first 300 operating hours, then each 1000 hours thereafter or annually. The oil fill/oil drain opening is labled "OHL". After cleaning and sanitizing the pump, drain all oil and residue into a clean measuring container.

- If the oil is milky in appearance, it is contaminated with water. Refill pump with clean, fresh oil, using amounts and type shown in *Maintenance*. Check oil condition again after 300 operating hours.
- If the oil is contaminated with both water and pollutants, the main seal must be replaced and the oil changed. Recheck oil condition after 300 operating hours.

NOTICE: Whenever the main seal is being serviced, remove oil and replace with new oil at reassembly. Use only HLP hydraulic mineral oil, viscosity class 22 to 46 (Spinesso or Nuto, from ESSO).

The filling quantity is shown in *Product Specifications*. **NOTICE**: Fill oil reservoir with the exact quantity of oil specified. The pump will become inoperable if overfilled.

Cutting Rotor

A WARNING Hazardous voltage, hazardous cutter, and possible unexpected starts. Disconnect the electrical power and keep your hands away from the pump inlet opening when working on or handling the pump for any reason. Do not use automatic reset controls with this pump.

- 1. Disconnect the electrical power supply.
- 2. Disconnect the discharge piping (this step is not necessary if you have a guide-rail lift-out system).
- 3. Hoist the pump out of the pit using the lift-out system or the lifting chain (not the cord) and place the pump in a suitable area where it can be cleaned.
- 4. Remove all scale and deposits from the pump. Check visual appearance of all pump housing screws and mating surfaces. Tighten any loose fasteners.

AWARNING Risk of infection from pathogens (such as hepatitis) which can collect on pump during normal operation. Submerge the complete pump in a disinfectant solution (dilute chlorine bleach) for at least one hour before disassembly.

5. Using a feeler gauge, measure the cutting clearance between the cutting rotor and the cutting plate. See Figure 6.



Figure 6: Cutting clearance measurement location.

- 6. If cutting clearance is more than .007" (0.2 mm) wedge the cutting rotor with a piece of wood and unscrew socket head capscrew.
- 7. Remove compression washer, cutting rotor, and one adjusting shim. Replace cutting rotor, compression washer and socket head capscrew.
- 8. Block cutting rotor with a piece of wood and tighten socket head capscrew to 5.9 ft-lb (8 Nm).
- 9. Verify cutting rotor moves freely and cutting clearance is less than .007" (0.2 mm). If clearance is still too large, repeat steps 6-9.

Cutting Plate

After cleaning and sanitizing the pump, inspect the cutting plate and verify absence of cracks, tears or gouges.

- 1. If damaged, replace cutting plate by removing cutting rotor (as described above), then remove four socket head capscrews that attach plate to volute.
- 2. Replace cutting plate and four socket head capscrews. tighten capscrews to 5.9 ft-lb (8 Nm).
- 3. Replace adjusting shims, compression washer, cutting rotor and socket head capscrews.
- 4. Block cutting rotor with a piece of wwod and tighen socket head capscrew to 5.9 ft-lb (8 Nm).
- 5. Verify cutting rotor moves freely and cutting clearance is less than .007" (0.2 mm). If not correct, repeat steps 6-9 in previous procedure.

Cleaning the Impeller

- 1. To clean the impeller and volute, remove the cutting rotor, as described previously.
- 2. Unscrew four 5 mm Allen screws attaching the volute and remove the volute casing. It may be necessary to tap around the parting line with a lead or rawhide hammer to loosen the casing.

A CAUTION Worn impellers can have sharp edges that could cut or scratch. Wear protective gloves.

- 3. Carefully clean the impeller and volute surfaces. Inspect for obvious cracks or damage.
- 4. Reverse steps 1 to 3 to reassemble the pump.

Impeller Removal

- 1. Follow steps 1 through 4 under Cutting Rotor.
- 2. Unscrew the four 5 mm capscrews holding the volute to the seal plate and tap the volute to loosen it. Remove the volute.

NOTICE: BE SURE you have the correct capscrews – the wrong ones will release the motor housing from the bracket and also release a lot of oil!

- 3. With a screwdriver (or two) behind the impeller, work the impeller down the shaft until it is free. Remove it.
- 4. If the shaft key stayed in the shaft, remove it.
- 5. Reverse steps 1 through 4 to reassemble the impeller. Torque the four capscrews to 5.9 ft-lb (8 Nm).

Main Seal Replacement

- 1. Follow steps 1 through 4 under *Cutting Rotor*.
- 2. Follow steps 2 through 4 under Impeller Removal.
- 3. Lay the pump on its side and remove the oil plug from the bracket. The oil fill/oil drain opening is labled "OHL". Drain oil into a clean container and check for water and pollutants in the oil.

NOTICE: Water is heavier than oil. Look for water at the bottom of the oil. It will appear as tiny bubbles. If there is water present in the oil, the shaft seal or the O-Ring will need to be replaced. If there is no water present in the oil, the shaft seal and O-Ring do not need replacing.

- 4. Remove the two 8 mm capscrews that hold the motor housing to the bracket. Tap around the parting line with a lead hammer or rawhide mallet to loosen the motor housing. Remove the motor housing from the bracket.
- 5. Remove the oil seal and oil seal bushing from the motor housing.
- 6. Remove the motor housing O-Ring and clean the O-Ring groove.
- 7. Remove the seal retaining ring from the motor housing.

NOTICE: The shaft seal consists of several parts. Be sure that you do not scratch or mar the shaft when removing the seals. If the shaft is marred, it must be dressed smooth with fine emery or crocus cloth before installing new seal. Do not reduce the shaft diameter.

- 8. Pull and turn the rotating seal halves to remove them from the motor shaft. If necessary, use a flat blade screwdriver to help pry the seals from the shaft.
- 9. Unscrew four capscrews and remove the bracket from the motor housing.
- 10. Use a flat blade screwdriver and very carefully pry the lower seal half from the cavity.
- 11. Use a flat blade screwdriver and very carefully pry the upper seal half from the bracket cavity.

Installing the New Shaft Seal

NOTICE: Install all new O-Rings, seals, and gaskets during reassembly. It is good practice to replace the O-Rings each time the pump is serviced.

- 1. Clean the seal cavities in the bracket and motor housing.
- 2. Lubricate the seals with a very small amount of clean seal chamber oil.
- 3. Inspect the shaft for nicks and scratches.
- 4. With finger pressure only, press the stationary seal halves firmly and squarely into the seal cavities in the bracket and motor housing.

NOTICE: Be sure you do not scratch the seal surface.

- 5. Reinstall the lower seal retaining ring.
- 6. Reinstall the bracket on the motor. Use a new O-Ring. Torque 8 mm capscrews to 14.8 ft-lb (20 Nm).
- 7. Slide the rotating seal components onto the shaft. NOTICE: Be sure you do not scratch the seal surface. Be careful that the shaft shoulder does not damage the seal faces when they are passing over the shaft. Make certain the polished surfaces of the rotating seals face the mating surfaces of the stationary seal halves.
- 8. Clean the O-Ring groove in the bracket and install a new O-Ring.

NOTICE: It is good practice to replace the O-Rings each time the pump is serviced.

- 9. Reinstall the oil seal and the oil seal bushing on the shaft.
- 10. Reinstall the impeller drive key in the keyway on the shaft.
- 11. Using the key as a guide, reinstall the impeller on the shaft.
- 12. Reinstall the volute on the seal plate. Torque four fasteners to 5.9 ft-lb (8 Nm).
- 13. Reinstall the cutting rotor.
- 14. Block the cutter with a block of wood and reinstall the socket head capscrew. Torque capscrew to 5.9 ft-lb (8 Nm).
- 15. Refill the bracket with fresh, clean oil. See *Product Specifications* for specific amount.
- 16. Stand the pump on its feet. Check for free rotation of the impeller.

The pump is ready to return to service.



Item # ->	1	2	3	4	5	6	7	8		
Model	Housing	Rotor	Seal Set*	Volute	Wear Plate	Cutting	Impeller	Cord & Cord Entry		ry
	with stator			Casing	Set**	Set***		25′	50′	100′
G2D-01				DD 1040291						
G2D-21	KF-JF45051	KF-JF20969	KF-JF21434	KP-JP40381	-	KF-JF43090	KP-JP210/5			
G2D-03	RP-JP43639									
G2D-23	RP-JP43908	RP-JP42626					RP-JP25645			
G2D-43	RP-JP43640							RP-JP43063	RP-JP43699	RP-JP43700
G2DT-01							RP-JP43344			
G2DT-21	KP-JP43030	RP-JP42781	KP-JP43695	KP-JP42577	KP-JP43693	KF-JF43094				
G2DT-03	RP-JP43637									
G2DT-23	RP-JP43907									
G2DT-43	RP-JP43638									
G3D-01		DD 1042610							DD 1042960	DD 1D42070
G3D-21	KP-JP43652	KP-JP43610						KP-JP43868	KP-JP43869	KP-JP438/U
G3D-03	RP-JP43641						RP-JP21876	DD 1042042	RP-JP43699	RP-JP43700
G3D-23	RP-JP43909]		DD 1040201						
G3D-43	RP-JP43642	RP-JP20875	KP-JP21454	KP-JP40381	-	RP-JP43696				
G5D-03	RP-JP43641							KP-JP43063		
G5D-23	RP-JP43909							RP-JP44134		
G5D-43	RP-JP43642									
G7D-43	RP-JP43643	RP-JP21929	RP-JP21966	RP-JP21939	RP-JP43703		RP-JP43066	RP-JP43061	RP-JP43701	RP-JP43702

* Seal Set contains all O-rings, rotary shaft seal and mechanical seal to service entire pump.

** Wear Plate Set contains wear plate and attachment screws.

*** Cutting Set contains cutter, cutter plate, shims, washer, cap and allen screws, enough to service entire cutting system.

A WARNING Hazardous voltage. Can shock, burn, or kill. Disconnect power before attempting any service or repair work on pump.

AWARNING Hazardous impellers and unexpected starts which can cause loss of fingers. Keep hands away from pump suction inlet when working on or servicing pump.

Symptom	Possible Cause(s)	Corrective Action					
Motor not running	Motor protector tripped.	Allow motor to cool. Make sure pump is completely submerged. Clear debris from volute and impeller. Check for high amp draw.					
	Open circuit breaker or blown fuse.	Replace fuse or reset breaker. If circuit breaker opens repeatedly, don't reset it - call a licensed electrician.					
	Impeller clogged or binding.	Check amp draw. If it is more than twice the nameplate amps, the impeller is locked. Bearings and shaft may be damaged. DISCONNECT POWER, clear debris from volute, impeller, and cutter as needed.					
	Power cable damaged.	Resistance between power cable and ground should be infinity. If any reading is less than infinity, call a licensed electrician.					
	Bad control panel.	Inspect control panel wiring. Call a licensed electrician.					
	Defective liquid level switch.	With switch disconnected from power, check continuity through switch while activating liquid level switch. Replace switch if necessary.					
	Not enough liquid in wet well to activate controls.	Allow the liquid to rise several inches above the switch-on level.					
	Liquid level cords tangled	Untangle cords for free operation.					
	Automatic controls defective	Try running pump in manual mode. If it runs, the automatic control is at fault.					
Pump runs continuously	Liquid level control cords tangled	Untangle cords for free operation.					
	Pump is airlocked.	Stop pump for about one minute, then restart. Repeat stopping and starting until the airlock clears. If the airlock persists, DISCONNECT POWER, pull the pump and drill a 1/8" hole in the discharge pipe between the pump discharge and the check valve.					
	Flow in matches or exceeds the pump's capacity.	A larger pump or more pumps may be needed.					
Little or no effluent delivered from pump	Check valve plugged, stuck shut, or installed backwards.	Make sure check valve is installed correctly (flow arrow should point away from pump) and functioning correctly.					
	System head excessive.	Consult dealer.					
	Pump suction plugged.	DISCONNECT POWER, pull pump, inspect, and clear as needed.					
	Wrong voltage or not wired correctly.	Check pump's rotation; check nameplate voltage against supply voltage (they must match); consult a licensed electrician.					
	Pump is air locked.	Stop pump for about one minute, then restart. Repeat stopping and starting until the airlock clears. If the airlock persists, DISCONNECT POWER, pull the pump and dril 1/8" hole in the discharge pipe between the pump discharge and the check valve.					
	Worn or damaged impeller.	DISCONNECT POWER, pull pump and inspect impeller. Replace if necessary.					
	Liquid level controls incorrectly installed or defective.	Reposition or replace as necessary.					
Pump cycles constantly	No discharge check valve installed.	Install discharge check valve.					
	Discharge check valve stuck open.	Repair or replace check valve as necessary.					
	Sewage wetwell too small.	Consult dealer.					
	Liquid level controls incorrectly installed or defective.	Reposition or replace as necessary.					
	Pump too small for inlet flow.	Consult dealer about larger pump or second pump.					

Limited Warranty

Jung Pumpen warrants to the original consumer purchaser ("Purchaser" or "You") of Jung Pumpen Effluent Pumps, Sewage Pumps, and Package Systems, that they will be free from defects in material and workmanship for the Warranty Period of 12 months from date of manufacture.

Our warranty will not apply to any product that, in our sole judgement, has been subject to negligence, misapplication, improper installation, or improper maintenance. Without limiting the foregoing, operating a three phase motor with single phase power through a phase converter will void the warranty. Note also that three phase motors must be protected by three-leg, ambient compensated, extra-quick trip overload relays of the recommended size or the warranty is void.

Your only remedy, and Jung Pumpen's only duty, is that Jung Pumpen repair or replace defective products (at Jung Pumpen's choice). You must pay all labor and shipping charges associated with this warranty and must request warranty service through the installing dealer or selling distributor as soon as a problem is discovered. No request for service will be accepted if received after the Warranty Period has expired. This warranty is not transferable.

EXCEPTIONS: Special Application Pumps, Filtered Effluent Pumps, Grinder Pumps, 2-1/2" Sewage Pumps, and Lift Systems are warranted for a period of 12 months from date of purchase or 18 months from date of manufacture, whichever comes first.

Jung Pumpen SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, OR CONTINGENT DAMAGES WHATSOEVER.

THE FOREGOING LIMITED WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE FOREGOING WARRANTIES SHALL NOT EXTEND BEYOND THE DURATION EXPRESSLY PROVIDED HEREIN.

Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on the duration of an implied warranty, so the above limitations or exclusions may not apply to You. This warranty gives You specific legal rights and You may also have other rights which vary from state to state.

This limited warranty supersedes and replaces all previous warranty publications.

Model [‡]	НР	PHASE	Frequency	Voltage*	F.L.C.	R.P.M.	Max. head		Max. flow rate		Weight ⁺		Cable SOOW	START PAK			
			Hz	Volts	Amp	1/min	ft	m	GPM	LPM	lbs	kg					
G2D-01		1		200	13.8	3330	82	25	75	284	84	38		SPGV-3			
G2D-03]	3]	200	8.6	3150	85	26	79	299	62	28		Not Required			
G2D-21]	1]	220	12	3330	82	25	75	284	84	38		SPGV-4			
G2D-23]	2		230	7.3	3150	0.5	26	70	200	299		10/6 400/6 10	Not Required			
G2D-43]	3		460	3.7	3200	65	26	/9	299							
G2DT-01		1]	200	9.2	3080			73	276]		12/6 AWG 12	SPGV-1			
G2DT-03]	3]	200	6	3150]	17	75	284	62	28		Not Required			
G2DT-21]	1	60	220	8.2	3080	56		73	276				SPGV-2			
G2DT-23]	2		230	5.1	3150			75	201				Not Poquired			
G2DT-43				460	2.6	3200			/3	204				Not Required			
G3D-01		1		200	20.3	3540	115	35			99	45	10/6 AWG 10	SPGV-5			
G3D-03]	3		200	12.3	3450	112	34			95	43	12/6 AWG 12	Not Required			
G3D-21	3	1		220	18.7	3540	115	35	66	250	99	45	10/6 AWG 10	SPGV-6			
G3D-23							230	11	3450	110	24						
G3D-43				460	6.3	3470	112	54									
G5D-03				200	16	2410					95	43	12/6 AVA/C 12	Not Required			
G5D-23	5			230	14	5410	151	46	49	185			12/6 AWG 12	Not Kequired			
G5D-43]			460	7.2	3425											
G7D-43	7.5]		400	11	3480	180	55	75	284	198	90					

Jung Pumpen 293 Wright Street, Delavan, WI 53115 Phone: 800-642-5930 • jungpumpen-us.com

* Input voltage ±10%

+ Weight with 25 ft (7.6 m) SOOW cable. Add 7 lb (3.2 kg) for each additional 25 ft (7.6 m).

‡ Oil chamber capacity is 45.8 in³ (750 cc) for G2D-01, G2D-21 and G3D; 23.2 in³ (380 cc) for other G2D models; 158.7 in³ (2600 cc) for G7D

Table I: Dimensional specifications





Model	A		В		C		[)	l	E	F										
	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in									
G2DT-01	417	16.42	247	0.72	100	1 9 1	254.5	10.02	1.41	E E E	297	15.24									
G2DT-21	417	10.42	247	9.72	123	4.04	254.5	10.02	141	5.55	307	13.24									
G2DT-03																					
G2DT-23	378.4	14.9	221.9	8.73	103	4.06	217.1	8.55	136.5	5.37	349.5	13.76									
G2DT-43																					
G2D-01	417	16 42	247	0.72	100	1 9 1	254.5	10.02	1.4.1	E E E	297	15.24									
G2D-21	417	10.42	247	9.72	123	4.04	234.3	10.02	141	5.55	307	13.24									
G2D-03																					
G2D-23	378.4	14.9	221.9	8.73	103	4.06	217.1	8.55	136.5	5.37	349.5	13.76									
G2D-43																					
G3D-01	42.4 1	17.09	17.09	17.00	17.00									427	17.0						
G3D-21	434	17.09									437	17.2									
G3D-03																					
G3D-23												247	0.72	100	4.04	2545	10.02	1.41			
G3D-43	417 16.42	247	9.72	123	4.84	254.5	10.02	141	5.55	207	15.24										
G5D-03		417 16.42	42								387	15.24									
G5D-23																					
G5D-43																					
G7D-43	500	19.69	295	11.61	140	5.51	293.8	11.57	148	5.83	523	20.59									