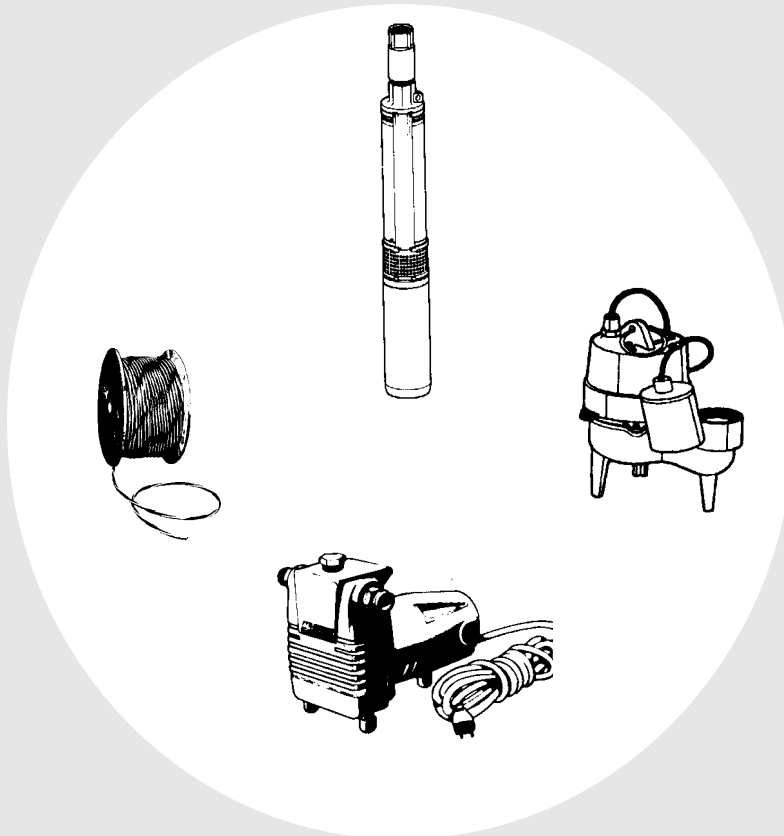
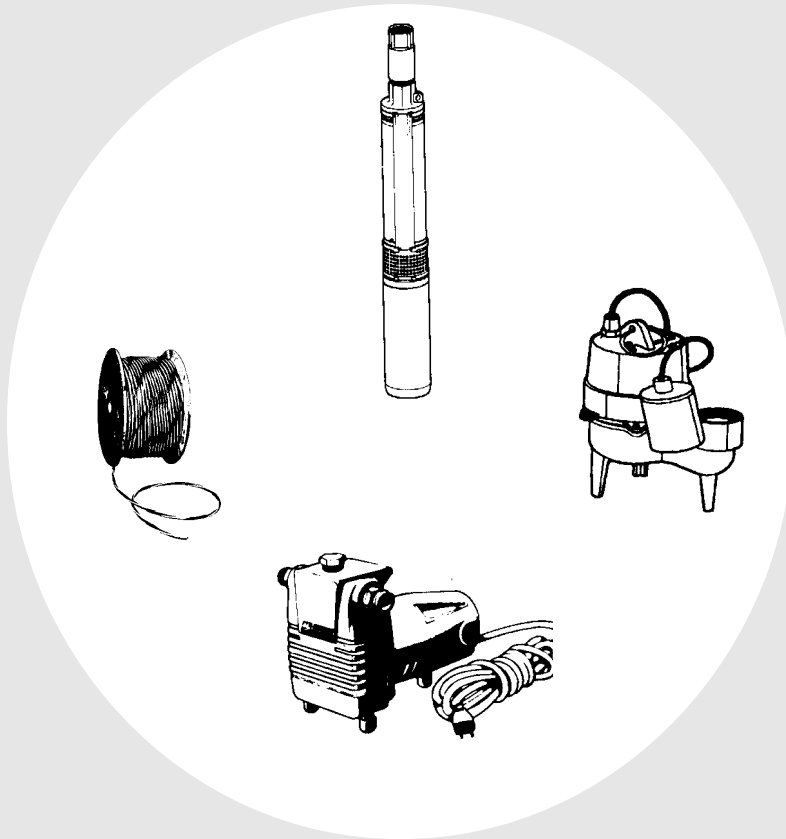


PUMPS



PUMPS

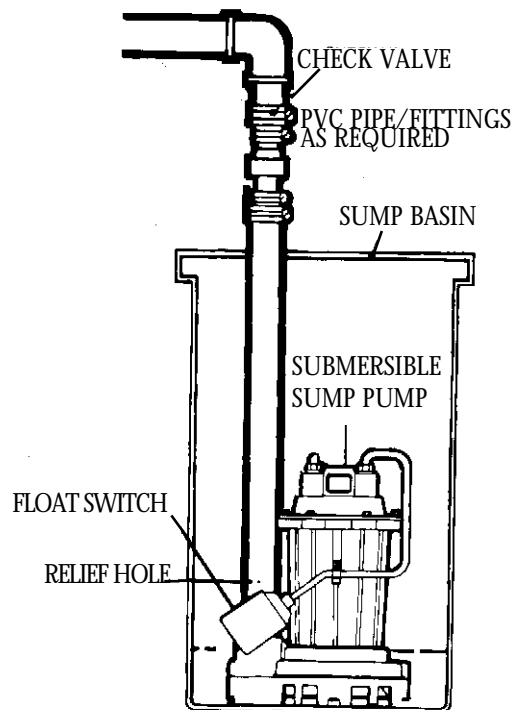
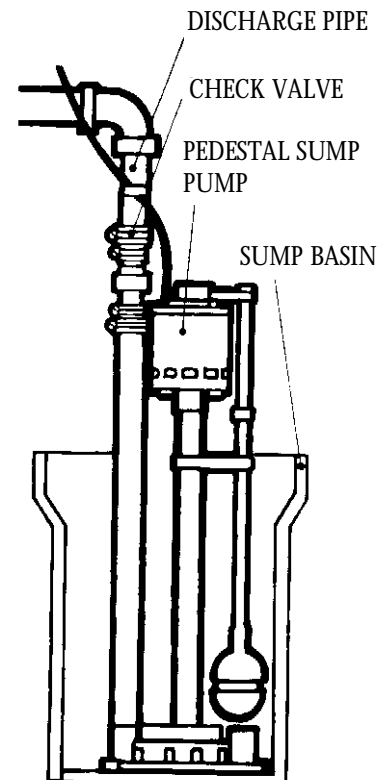


DUFF SUMP PUMPS AND CONTROLS

Duff submersible and pedestal sump pumps are designed to pump any basement drainage water and residential flooding.

TOOLS AND MATERIALS NEEDED FOR SUBMERSIBLE OR PEDESTAL SUMP PUMP INSTALLATION

- * Duff hose kit or PVC pipe and cement (or galvanized pipe)
- * PVC adapter (same size as PVC/ABS pipe)
- * Check valve
- * Plastic, fiberglass or concrete sump basin
- * Screwdriver, pipe wrench, adjustable wrench (med.-large)
- * Hacksaw with 24-tooth blade for cutting plastic pipe
- * Knife or round file for smoothing inside of plastic pipe connections.

**GRUNDFOS****BASIC SUBMERSIBLE SUMP PUMP
INSTALLATION****BASIC PEDESTAL SUMP PUMP
INSTALLATION**

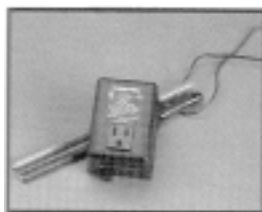
SUMP PUMP CONTROLS



DIAPHRAGM LEVEL CONTROL

Rated for 115V operation.
Available on all SS Style
pumps

FIG. NO.	PRICE
8238	



SSA NARROW SUMP SWITCH

No float to tangle and no moving parts - just stainless steel sensors.
Converts system from wide angle float to stationary liquid level detection
switch. For use in small sumps where it is not practical for two floats
because sump opening is too small or corroded. Fully adjustable sensor rods
for desire on/off levels.

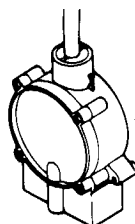
FIG. NO.	PRICE
52287	



LIQUID LEVEL CONTROL

Patented solid state
design
Use with sump or utility
pumps
Keep sumps, basements,
or tanks dry
Use to actuate water
level alarms
Mounts anywhere - on
pump, wall, etc.

FIG. NO.	PRICE
10644	

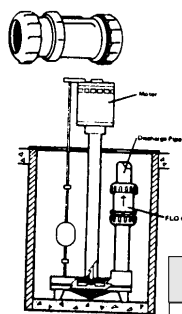


LITTLE GIANT LOW LEVEL DIPHGRAM SWITCH

Converts any manual pump up through 1/2 HP to
automatic operation on level 6".

FIG. NO.	PRICE
25363	

SUMP PUMP TRIM



PVC SUMP PUMP SWING CHECK

Compression. One size
fits 1 1/2x1 1/2,
1 1/2x1 1/4, or
1 1/4x1 1/4

FIG. NO.	PRICE
15900	

CORRUGATED SUMP PUMP HOSE KIT

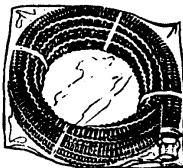


FIG. NO.	PRICE
15851	

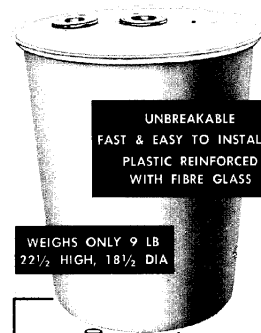
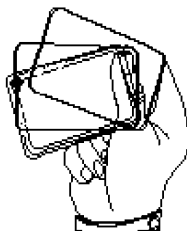


SUMP PUMP CHECK VALVE

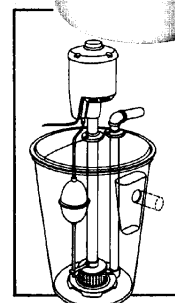
Super quiet
Fiberglass body
Stainless steel flapper
Fits PVC, steel or copper

SIZE	FIG. NO.	PRICE
1 1/4 HxMale	15838	
1 1/4 HxH	15845	
1 1/2 HxH	15846	
2 HxH	15847	
3 HxH	15849	

**DUFF GLADLY
ACCEPTS VISA AND
MASTERCARD!**



WEIGHS ONLY 9 LB
22 1/2" HIGH, 18 1/2" DIA



COMES
READY TO
INSTALL
AS SHOWN
AT LEFT
•
ONE MAN
DOES IT
IN ABOUT
30 MIN.
•
LID KEEPS
OUT VERMIN
AND DIRT.
INVERT AND
DRILL IT
FOR SURFACE
DRAIN.

SUMP PIT
18x22 Pit and Lid for
submersible or upright
sump pump.

FIG. NO.	PRICE
10885	



SUMP PUMPS

SUBMERSIBLE HIGH TEMPERATURE PUMP

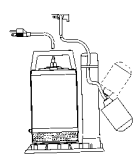
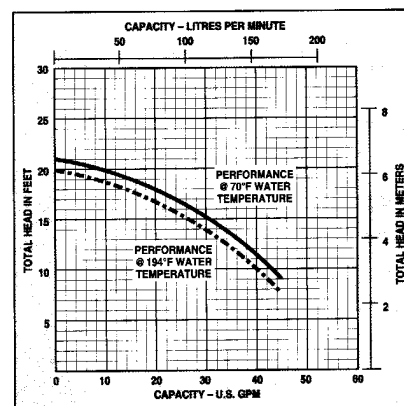
Cast Iron. Solids handling capability to 3/4", 1/3 HP, 115v. 1 1/2" NPT vertical discharge. Includes separate high temperature mercury float switch. **APPLICATIONS:** boiler blow down pits, condensate pits, hot water sumps. Liquid temperature - 200°F (93°C)

ORDERING INFORMATION

Catalog Number	HP	Max. Load Amps	Volts	Phase/Cycle	Solids Handling Capability	Discharge
33040	1/3	12.0	115	1/60	3/4"	1-1/2" NPT

**GREAT FOR
HOT WATER**

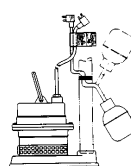
PERFORMANCE CURVE



HEAVY DUTY BRASS SUMP PUMP

Durable bronze body-industrial as well as domestic applications. Dependable wide-angle or diaphragm level control. American made 1/2 HP motor, with over-load protection. 1 1/2" female discharge - 1800 GPH at 28' head.

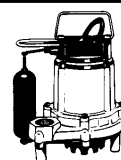
FIG. NO.	PRICE
8209	



SUBMERSIBLE SUMP PUMP

Durable cast iron body. Reliable 1/3 HP American made motor. Dependable wide-angle or diaphragm level control. Adapts to manual or automatic operation.

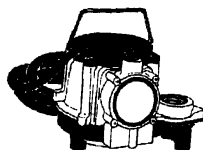
FIG. NO.	PRICE
47005	



FLOAT TYPE SUMP PUMP

Mechanical snap action switch, cast iron epoxy coated, 10' power cord, 1/3 HP, 1 1/2" discharge. Model 6E-CIA-SFS.

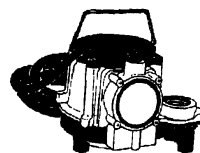
FIG. NO.	PRICE
9283	



CAST BRONZE SUMP PUMP

1/2 HP, 1 1/2" discharge, heavy duty, diaphragm switch, 10' powercord.

Gallons Per Hour			shut off	PSI	Fig. No.	Price
1'	10'	20'				
3250	2500	1550	22.9	9.9	11541	



CAST IRON SUBMERSIBLE PUMP

Cast iron, epoxy coated, passes 1/2" solids, 1 1/2" discharge, diaphragm switch, 8' power cord, 1/3 HP motor.

Model 6-CIA.

Gallons Per Hour			shut off	PSI	Fig. No.	Price
1'	10'	20'				
2750	1750	750	18.0	7.8	11539	
SAME AS 11539 WITH 25' CORD LESS SWITCH						
2750	1750	750	18.0	7.8	48537	

BACK-UP SUMP PUMP SYSTEM

The greatest protection for basements. Uses any standard 12 volt battery. Battery is kept charged and automatically recharges when pump is used. If power goes out or the main sump pump fails, the battery pump will keep the basement dry and free of potential damage. Pump is made of corrosion resistant thermoplastics. High head pump to accommodate long piping runs. Sold LESS BATTERY.

Discharge Height above pumping level	Performance - up to 5100 gallons per hour						
	0'	5'	10'	15'	20'	25'	30'
Gallons per minute	23	20	18	14	10	6	1

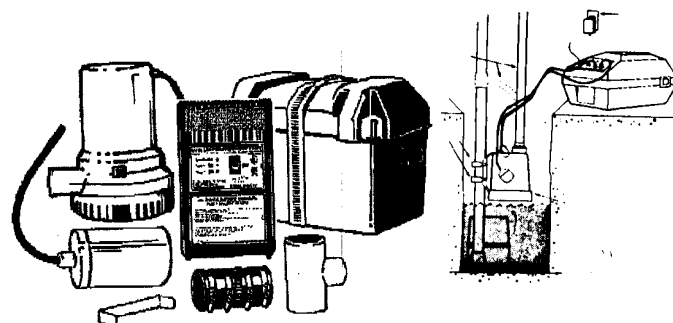
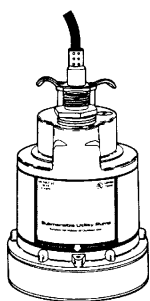


FIG. NO.	PRICE
58653	

For additional information call: 610-275-4453 or Fax: 610-279-6299
Please call for current prices.

SUMP PUMPS

GEYSER II "CLASSIC"

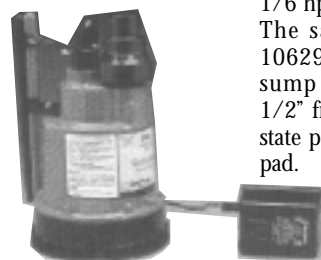


Open type trash impeller resists clogging
Removable screen for easy cleaning
1 1/4" FPG discharge with garden hose adapter included
Pumps floor dry to 1/8"
Fits into 7" opening
Two year warranty

FIG. NO.	PRICE
10629	

Discharge Height above pumping level	Performance - up to 5100 gallons per hour				
	0'	5'	10'	15'	20'
Gallons per minute	21	19	17	14	8

GEYSER "CLASSIC" SUMPLESS

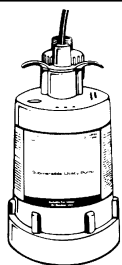


1/6 hp, 115 volt oil filled motor, 5 amps
The same "Classic" utility pump as 10629, but converted to an automatic sump pump that can pump down to 1/2" from floor. Includes pump, solid state probe switch, check valve and mud pad.

FIG. NO.	PRICE
10631	

Discharge Height above pumping level	Performance - up to 1260 gallons per hour				
	0'	5'	10'	15'	20'
Gallons per minute	21	19	17	14	8

SUPER GEYSER

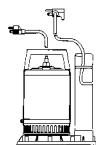


3 HP, 115 volt motor, 10 Amps
Pumps floor dry to 5/8"; fits into 7" opening
1 1/4" MPT discharge with garden hose adapter included.

FIG. NO.	PRICE
37878	

Discharge Height above pumping level	Performance - up to 1860 gallons per hour					
	0'	5'	10'	15'	20'	25'
Gallons per minute	36	29	27	21	12	1

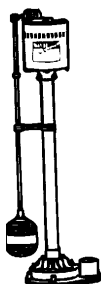
SUBMERSIBLE SUMP PUMP



Durable cast iron body.
Reliable 1/3 HP American made motor. Dependable wide-angle or diaphragm level control. Adapts to manual or automatic operation.

DESCRIPTION	FIG. NO.	PRICE
Sump pump w/ diaphragm switch	25253	

PEDESTAL SUMP PUMP



DESCR	FIG. NO.	PRICE
Bronze	47431	
Plastic	67490	

MARK IV



Heavy duty 1/2 HP, 115 volt oil filled motor, 6.3 Amps
High capacity - rate 85 GPM
Automatic operation features piggy-back style float switch
Removable snap-off strainer for easy cleaning Vent relief prevents air lock
1 1/2" MPT discharge
Fits into 2" diameter sump

FIG. NO.	PRICE
50555	

Discharge Height above pumping level	Performance - up to 5100 gallons per hour				
	0'	5'	10'	15'	20'
Gallons per minute	85	65	45	28	4

Don't see what you're looking for?
Call the pump experts at Duff Company for ALL your pump needs!
610-275-4453

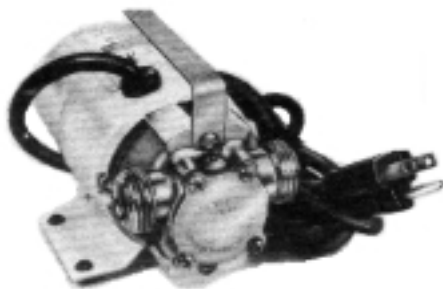
GRUNDFOS STAINLESS STEEL SUMP & UTILITY PUMP



Stainless steel. Handles clean or gray water. Pump up to 4080 gallons per hour, Series KP pumps can handle solids up to 3/8". Suited for hard to reach areas. Operates continuously in hot water up to 95o F. Automatic thermal protection and restart system to prevent motor damage. All stainless steel housing, impeller, and suction screen. Use for effluent, clear or dirty sump water, grey water and waste water, draining ponds, pits and tanks, de-watering, draining and filling tanks, draining pools & spas, light commercial mixing. DO NOT USE FOR: raw sewage, flammables, highly corrosive liquids. Flow range = .5-.68 US GPM. Temp range 32o-95oF (0o-35oC) Continuous, 32o-122oF (0o-50oC) Intermittent (totally submerged). Minimum pumping level - 1/2 inch

HP	Descr	Model	Fig. No.	Price
1/5	Auto	KP150A	67065	
1/3	Auto	KP250A	67158	
1/2	Auto	AP12A	67160	

ALL PURPOSE PUMPS

**ORIGINAL PONY PUMP**

115 volt, AC. Instant self-priming. Moves up to 360 GPM with hydro impeller. Excellent for even tanks and water heater. 3/4" GH in & out.

VOLT	FIG. NO.	PRICE
115 AC	10700	
12 V	10697	
IMPELLER REPAIR KIT		
FIG. NO.	PRICE	
28174		

H A N D I - P U M P

Cordless Utility Pump. Many household uses.

Powerful - Pumps up to 4.5 gallons per minute. Safe - non-electric, uses one 6 volt lantern battery (not included).

Completely Submersible!

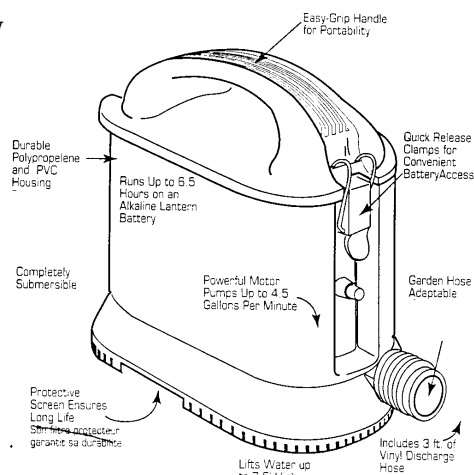
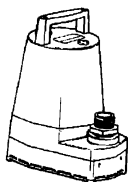


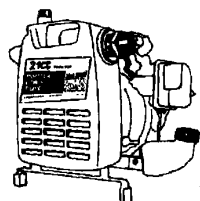
FIG. NO.	PRICE
65799	

**WATER WIZZARD**

Bottom pick up. 1" Female discharge. Epoxy coated aluminum, removes water to 1/8", 1" IP with garden hose adapter. Pumps to 26" high.

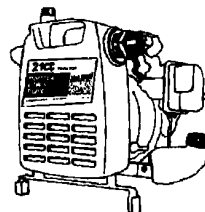
WITH LOW LEVEL SWITCH

FIG. NO.	PRICE	FIG. NO.	PRICE
46933		57068	

**PORTABLE GAS UTILITY PUMP**

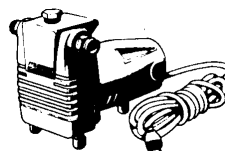
2 cycle McCullough engine, includes 3/4"x10' hose, primes in 15 seconds.

FIG. NO.	PRICE
44606	

**FUEL TRANSFER PUMP**

Gas driven (40 minutes to one tank), Self-priming, 3/4" IPS, wt=30 lbs. 21 CC McCullough engine.

FIG. NO.	PRICE
44607	

**UTILITY PUMP**

Compact, portable design, self priming. High powered 1/2 HP, 7500-RPM, 115 volt, double insulated american made motor. 3/4" inlet and outlet.

FIG. NO.	PRICE
9286	

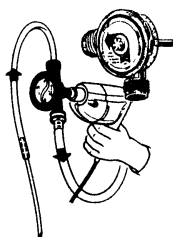
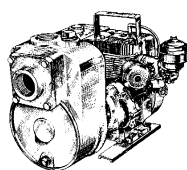
**DRILL PUMP**

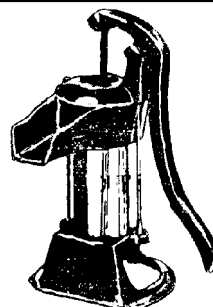
FIG. NO.	PRICE
10668	

**8M CONTRACTOR PUMP**

Heavy duty, cast iron case will survive even the most rugged applications. Self-priming. Non-clogging, semi-open, cast iron impeller. Gas-driven engine is air-cooled and has manual start.

3.5 HP, 2" inlet & outlet.

FIG. NO.	PRICE
45485	

**PITCHER PUMP**

- *Brass body
- *Left or right hand
- *Cut-a-way base
- *3" Dia. cylinder
- *1 1/4" pipe tape
- *Spout type

FIG. NO.	PRICE
10605	

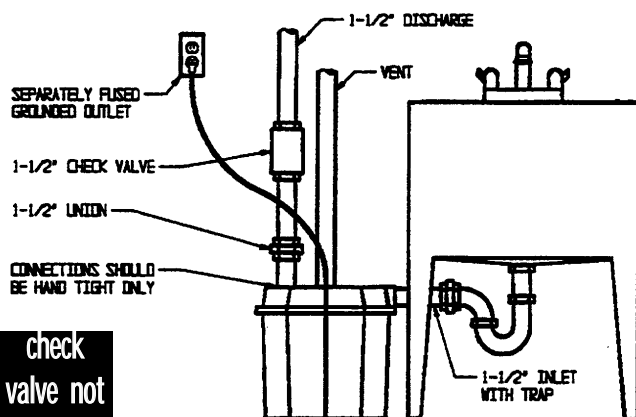
LAUNDRY TRAY PUMPS

LAUNDRY TRAY PUMP

Fully sealed, two gallon cast aluminum reservoir.



Model	Max PSI	HP	Wgt.	Fig. No.	Price
LTS-1	8	1/3	30	9115	
LTP-1	8	1/4	30	47184	
L111A	switch assembly only			9122	



check
valve not
included

AUTOMATIC LAUNDRY TRAY/SINK/SHOWER PUMP

1/3 hp, 1-1/4" discharge for full flow, high output performance. Over 30 gpm at 10'. Corrosion-proof receiver is attractive and light in weight, with over 5-gallons capacity. safety features include double-insulated construction, automatic thermal overload protection and complete factory pre-wiring. Sealed, submersible pump and switch design eliminates the possibility of moisture damage. Unit can be even installed below floor level. Diameter 13-1/4", height 14-3/4" shipping wt. 27 lbs.

FIG. NO.	PRICE
COMPLETE UNIT	
9125	



MODEL LP3A AUTOMATIC LAUNDRY TRAY PUMP

The control is a 15 Ampere heavy duty Microswitch manufactured by Minneapolis Honeywell Regulator Co. The diaphragm is made of heavy gauge neoprene, reinforced with nylon. A three way switch with Automatic off and manual settings. Also included is eight feet of three conductor electric cord and plug.

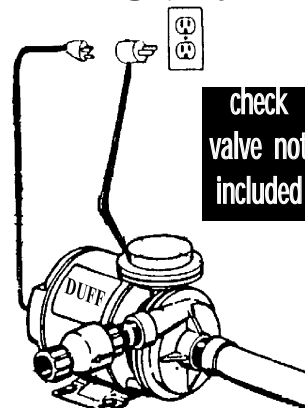
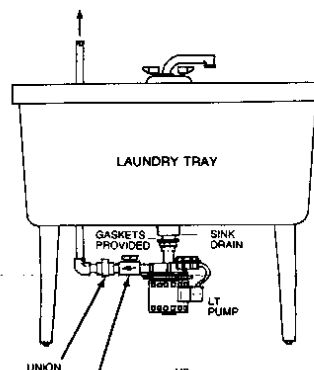


FIG. NO.	PRICE
9132	
SWITCH ONLY	
18150	



check
valve not
included

HORIZONTAL INSTALLATION
Pump may be installed in horizontal position but discharge must be in "up" position as shown.

MODEL LTA-1 AUTOMATIC LAUNDRY TRAY PUMP

Completely self-contained unit that is easy to connect directly to laundry tray tubs. Light weight and compact, this model eliminates reservoirs, traps, extra fittings and costly labor. (Automatic model LTA-1 includes a pressure-activated switch that turns pump on when water enters tub.)

ABS plastic design features high impact & corrosion resistance, thus assuring long life. 1/8 hp motor, 1550 rpm. Inlet: 1 1/2" NPSM; Outlet: 1" NPT. Integral junction box.

FIG. NO.	PRICE
42878	

GRUNDFOS STAINLESS STEEL SEWAGE PUMPS

Technical Data

PERFORMANCE RANGE:

- Flow: 0 – 170 U.S. GPM
- Head: 0 – 47.5 feet of water
- Horsepower: $\frac{1}{10}$ – $1\frac{1}{2}$ HP

SOLIDS HANDLING:

- 2" spherical solids

MOTOR TYPE:

- AC Induction
- Permanent split capacitor
- Oil filled
- Class F insulation
- Manufactured by Grundfos

MOTOR DUTY:

- Continuous, not to exceed 8 hours per 24 hour period

THERMAL PROTECTION:

- Automatic reset

STARTS PER HOUR:

- Maximum 20 starts per hour
- Evenly distributed once every 3 minutes

MOTOR BEARING SYSTEM:

- 2-ball bearing races

TEMPERATURE LIMITS: Fluid temperature

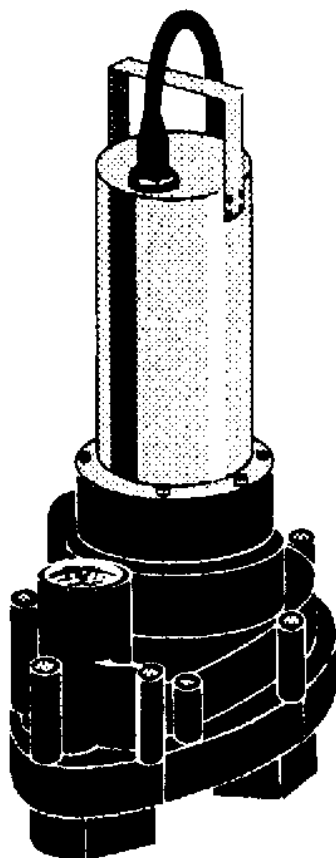
- Continuous operation when fully submerged
- 104°F (40°C)
- Intermittent operation (approx. 3-4 minutes)
- 140°F (60°C)

DISCHARGE SIZE: 2" female NPT

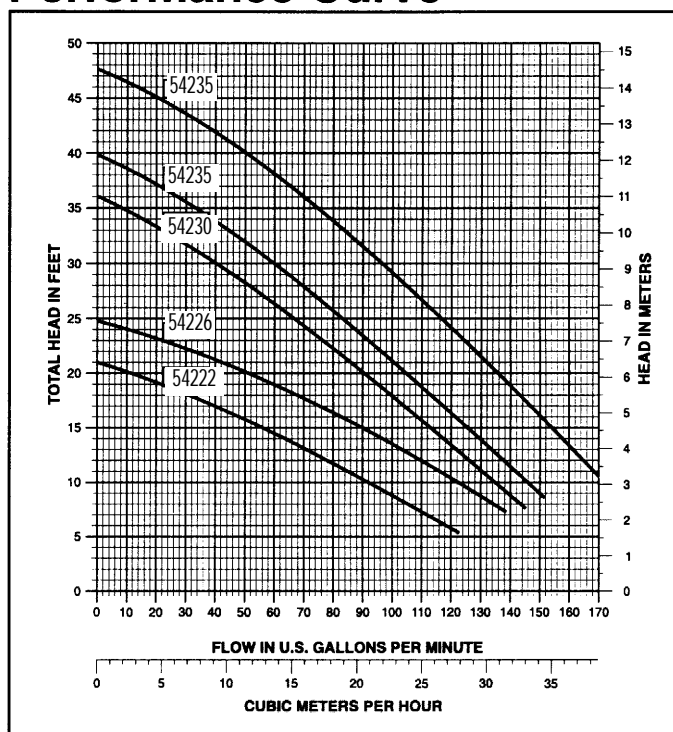
IMPELLER DESIGN:

- Vortex

APPROVALS: Listed 99K4



Performance Curve

**GRUNDFOS**

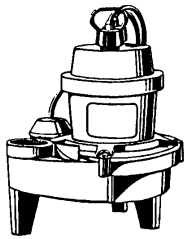
Leaders in Pump Technology

Figure No.	HP	Service Factor	PH	Voltage	Max Watts	MaxRun Amps	Locked RotorAmp	Nom Speed (rpm)	Price
54222	4/10	1.4	1	115	935	8.7	18	1625	
54226	1/2	1.6	1	115	1155	11.2	24	1635	
54231	3/4	1.5	1	230	2155	9.7	23	3335	
54234	1	1.4	1	230	2290	10.3	23	3315	
54236	1 1/2	1.3	1	230	2890	13.1	30	3350	

For additional information call: 610-275-4453 or Fax: 610-279-6299

Please call for current prices.

PACKAGED RESIDENTIAL SEWAGE SYSTEM



SEWAGE PUMP
2" solids, 115V, 1/2" IP

FIG. NO.	PRICE
----------	-------

9129	
------	--

used in #9130 assembly

1/2 hp 2" solids-handling 2" discharge

Features:

Heavy cast iron construction with 2-vane semi-open *HYTREL impeller

Oil filled, thermally protected motor

Permanently lubricated bearings

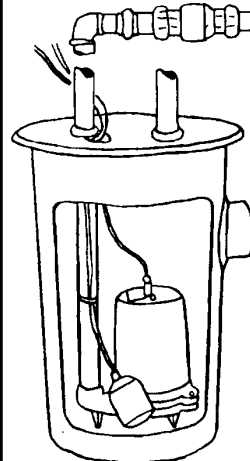
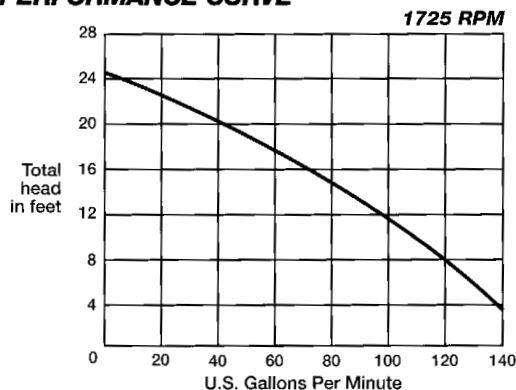
All stainless steel fasteners

Stainless steel rotor shaft

10' UL approved power cord with quick disconnect design - standard (consult factory for longer cord lengths)

Mercury-free float with series plug on automatic models

PERFORMANCE CURVE



SEWAGE EJECTOR COMPLETELY PRE-ASSEMBLED

*2" Solid handling

*2" Discharge vent

*3" or 4" inlet

*Capacity 37 gallons

*For residential and light commercial installations (up to 60 fixture units).

Features:

Durable polyethylene basin with reinforcing ribs for structural strength; 20" x 30"

'Torque stops' molded into the base provide added pump stability and assure proper clearance for the float switch.

Molded inlet hub has no bolts or gaskets - sized for 4" flexible couplings

25% more capacity than 18"x30"basins - provided more gallons per pump cycle and longer pump and switch life

2" discharge of schedule 80 PVC pipe (steel pipe nipple optional)

2" threaded vent flange

Reinforced polyethylene over (steel cover optional)

COMPLETE UNIT

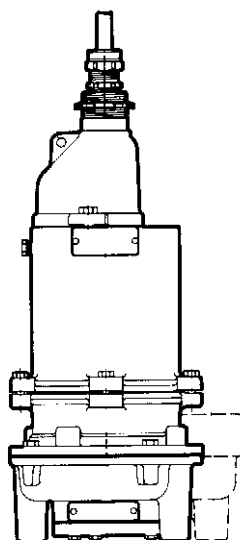
FIG. NO.	PRICE
----------	-------

9130	
------	--

20 x 30 PIT AND LID

25111	
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GRINDER SEWAGE PUMP

**ADVANTAGES BY DESIGN****IDEAL FOR USE IN PRESSURE SEWER SYSTEMS.**

- Recessed impeller provides steep non-overloading operating curve.

DURABLE MOTOR WILL DELIVER MANY YEARS OF RELIABLE SERVICE.

- Oil-filled motor for maximum heat dissipation and constant bearing lubrication.
- Recessed impeller reduces radial bearing loads, increases bearing life.
- High torque capacitor starts single phase or three phase motors for assured starting under heavy load.
- Optional seal leak probe warns of seal leak condition, helps prevent costly motor damage.
- Single phase motors have on-winding current and temperature sensitive overload.

COMPLETE GRINDER SEWAGE PUMP SYSTEM**GENERAL SPECIFICATIONS**

Pump		Electrical	
Speed – RPM	3450	Voltage	230 230 or 460
Horsepower	2	Hertz	60 60
Weight	71 lbs.	Phase	1 3
Height	16 ³ / ₄ "	Amps	12.5 6.1/3.1
Width	11"		
Discharge	1 ¹ / ₄ "		

Basin Package**Basin:**

30" x 36" or 24" x 42" fiberglass; 34" or 28" epoxy painted steel lid with 20" inner cover

Control Box:

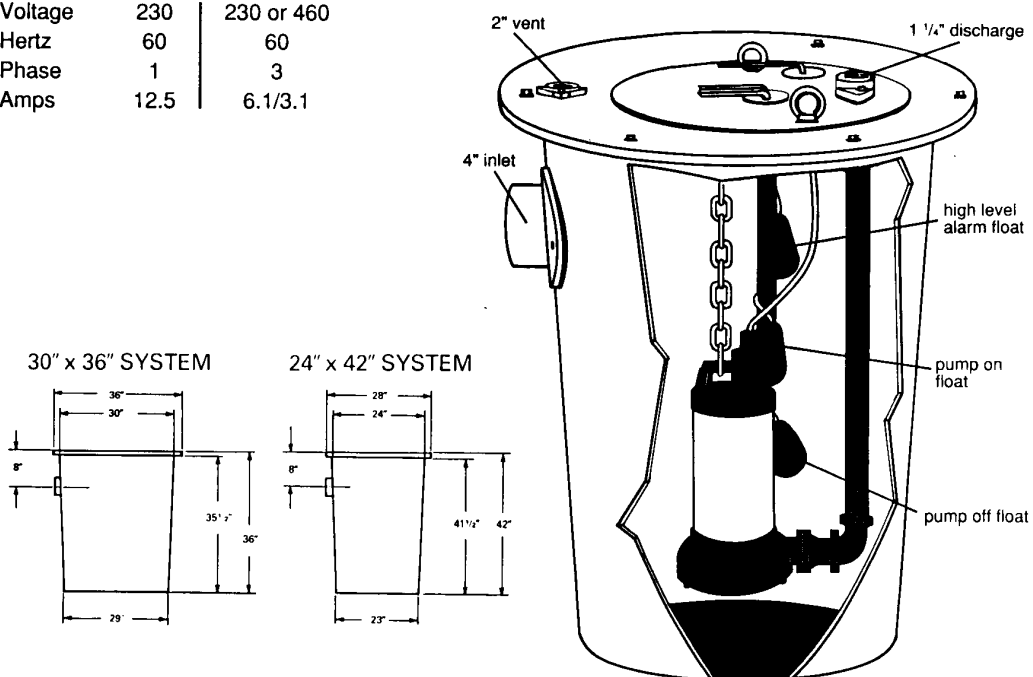
NEMA 4X control panel; hand-off-automatic switch; terminal strip; audible alarm, thermal overload and "sealminder"

Floats:

three encapsulated mercury switches in polypropylene housing; on, off, and alarm

Weight:

210 lbs. grinder pump system

WIRING PER SPECIFICATION

EFFLUENT PUMPS 1 1/2" DISCHARGE

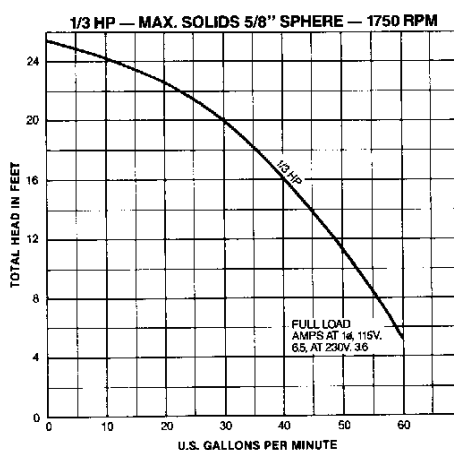


AURORA PUMP **G_S**
A UNIT OF GENERAL SIGNAL

HYDROMATIC SD25/33 Submersible Sump/Effluent Pump

Total Head (feet)	4	6	8	10	12	14	16	18	20	22	24	
GPM	1/4 HP	44	41	36	33	29	26	23	18	12	6	0
	1/3 HP	47	45	43	40	37	34	30	26	22	16	10

SIZE	FIG. NO.	PRICE
1/4 HP	24898	
1/3 HP	24899	



- Available in automatic or manual.
- Completely submersible.
- Non-clog bronze impeller.
- No suction screens to clean.
- Oil-filled, double ball bearing motor with built-in overload protection.
- Reliable diaphragm switch with piggyback plug-in.
- Rugged cast iron construction.
- Completely field serviceable.
- 1 1/2" NPT discharge.

DESCRIPTION	FIG. NO.	PRICE
Automatic OSP33A1	7897	
Manual OSP33M1	7892	

SEWAGE EJECTOR PUMPS 2" DISCHARGE

Total Head (feet)		4	8	12	16	20	24	28
GPM	4/10 HP	120	108	90	68	42	20	0

DESCRIPTION	FIG. NO.	PRICE
Automatic SP40A	8000	
Manual SP40M	8016	

Total Head (feet)		8	12	16	20	24	28	29
GPM	1/2 HP	150	120	95	70	40	7	0

DESCRIPTION	FIG. NO.	PRICE
Automatic SP50A	8030	
Manual SP50M	8053	



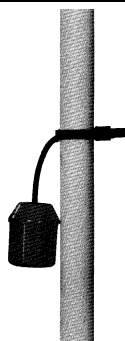
CONTROLS

PUMP SWITCHES - Pump switches designed to directly control pumps up to 1 HP at 120V and 2HP at 230V. Each of these switches has an adjustable pumping range and is available in various cord lengths, all with piggy back plug unless noted. Each pump switch is UL Listed and CSA Certified.

JUNIOR SUPER SINGLE

Mercury-activated
Controls pumps up to 1/2HP at 120V and 1HP at 230V
Not sensitive to rotation
Recommended for use in non-turbulent applications
Not designed to be directly wired to relays or motor controllers.
Pumping range: 5.5 to 17 inches
Available for pump up or pump down application.

MODEL	FIG. NO.	PRICE
JSD	10883	
JSU	43320	

SUPER SINGLE

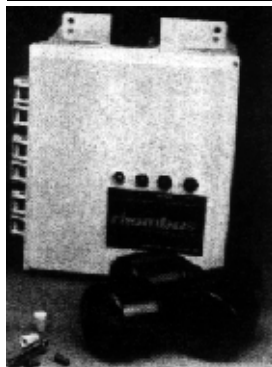
Mercury-activated
Controls pumps up to 1/2HP at 120V and 2HP at 230V
Not sensitive to rotation or turbulence
Suitable for use with intrinsically safe circuits
Pumping range: 5.5 to 15 inches
Available for pump up or pump down application.

MODEL	FIG. NO.	PRICE
SSD less plug 120/230v	10875	
SSD 120v	10874	
SSD 230v	10878	
SSU 120v	45343	

DOUBLE FLOAT

Mercury-activated
Controls pumps up to 1 HP at 120V and 2HP at 230V
Not sensitive turbulence
Pumping range: 1 to 48 inches (wider ranges available)
Available for pump up or pump down application.

MODEL	FIG. NO.	PRICE
DFD 120V	10884	
DFU 120V	41239	
DFD 230V	25278	
DFU 230V	41240	
DFU 230V less plug	58134	
DFD 230V less plug	50365	

DUPLEX ALTERNATING PUMP CONTROL SYSTEM

RHOMBUS TYPE 122 - Control panel is designed to alternately control two single-phase pumps in residential and commercial water and sewage systems. The alternating action equalizes pump wear. In addition to the alternating pump control, this system provides override control should either pump fail. If an alarm condition occurs, an alarm switch activates the audio/visual alarm system.

Common applications include lift stations, pump chambers, sump pump basins and irrigation systems. One control for either indoor or outdoor use.

FIG. NO.	PRICE
41559	

TANK ALERT 1

PUMP ALARM SYSTEM - Designed to visually and audibly warn of threatening high or low liquid level conditions in lift pump chambers, sump pump basins, holding tanks, sewage plus irrigation and other water systems. The standard alarm system includes a Tank Alert I and a sensor float control switch.



Designed for indoor use
Features horn and warning light
Switching mechanism operates on low voltage and is designed to reduce the possibility of shock
Includes optional auxiliary dry contacts for remote alarm hookup
UL Listed and CSA Certified

FIG. NO.	PRICE
10871	

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For additional information call: 610-275-4453 or Fax: 610-279-6299
Please call for current prices.

LITTLE GIANT PUMPS

Small Submersible Pumps

Designed to operate when the pump is totally submerged in fluid, Little Giant Small Submersibles are hermetically sealed and filled with a special oil that provides lifetime lubrication and rapid dissipation of heat. The new 10EA series pump is epoxy encapsulated instead of oil filled.

FEATURES

Except where noted, all units feature:

- * Cast aluminum housing with protective epoxy coating.
- * 1/4" MNPT discharge
- * 6' power cord with 3 prong molded plug
- * Buna-N seal

Model P-AAA

Corrosion-resistant, glass filled nylon housing can be set on all five sides. Screen flush with pump side allows more complete pickup of fluid. Impedance protected. UL listed.

Model 1-AA

Polypropylene front and impeller, with polyethylene screen. 3' power cord with 3 prong molded plug.

Model 1-EA

Compact pump with epoxy encapsulated motor; case is constructed of cast aluminum and polyester. Volute, impeller and screen and polypropylene. Perfect for fresh water and circulation/aeration in aquariums. Impedance protected. UL Listed.

Model PCPK-N (Pool Cover Pump)

For standing water removal from pool cover. Also ideal for use as a submersible pump in

waterfall, fountain, sump, bilge, pond and other applications.

Model 1-MA

Side intake and vertical discharge. Polypropylene front, impeller and screen. UL Listed.

Model 1

Polypropylene front and impeller, with polyethylene screen. UL Listed.

Model 1-A

Same as Model 1 above, with smaller motor. UL Listed.

Model 2E-N

Smooth, hooded intake with polypropylene screen. Vertical discharge. Thermally protected. UL Listed.

Model 4E-34N

Polypropylene screen. 3/4" FNPT intake and 1/2" MNPT discharge., Viton seal. Thermally protected. UL Listed.

Model NK-1

Designed for use in mild acids, alkalies and hard water applications. Has glass-filled corrosion-resistant nylon housing. Viton seal. Thermally protected.

Model NK-2

Same as above, with larger motor.



Dual Purpose Pumps

Little Giant dual purpose pumps may be used either totally submerged or in an open air closed line system application. Pumps are filled with a special oil that provides lifetime lubrication and rapid dissipation of heat. The new 1-EA 42 pump epoxy encapsulated instead of oil filled.

FEATURES

Except where noted, all units feature:

- * Cast aluminum housing with protective epoxy coating.
- * Threaded intake and discharge ports
- * Nylon pumping head and impeller
- * 6' power cord with 3 prong molded plug
- * Thermal overload protection
- * Buna-N Seal

Model 1-EA-42

Compact, submersible or in-line pump with epoxy-encapsulated motor; outer case is constructed of durable die cast aluminum and polyester. Volute and impeller are nylon. Impedance protected. Has both 1/2" MNPT and 1/4" FNPT intake ports and 1/4" MNPT discharge port. UL Listed.

Model 1-42A

Has both 1/2" MNPT and 1/4" FNPT intake ports, and 1/4" MNPT discharge port. UL Listed.

Model 1-42

Same as above with larger motor. UL Listed.

Model 2E-38N

3/8" FNPT intake and 1/4" MNPT discharge ports. Viton seal and stainless steel backplate. Used in Hot Tub and spa applications. 10' power cord.

Model 3E-12N

3/4" FNPT intake and 1/2" MNPT discharge ports. Nylon screen. Viton seal. UL Listed.

Model 3E-12NR

Same as Model 3E-12N, with heavy duty motor. UL Listed.

Model 3E-112R

Same as model 3E-12N, with high pressure impeller. UL Listed.

Small Submersible
Dual Purpose

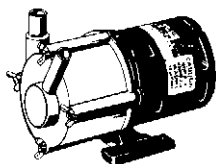
	Gallons Per Hour @ 115 VAC 60 Hz			Shut Off	PSI	Fig. No.
	1'	3'	5'			
P-AAA	120	70	-	4.6'	2.0	11498
1-AA	170	140	100	7.0'	3.0	11500
1-A	170	140	100	7.0'	3.0	11502
1	205	168	120	7.4'	3.2	11503
NK-1	210	180	150	10.2'	4.4	11514
2E-N	300	255	205	11.8'	5.1	11505
NK-2	325	300	270	12.3'	5.3	11515
4E-34N	710	690	670	23.1	10.0	11512
4E-34NR	810	790	745	24.5	10.6	11513
PCPK-N	325	300	270	12.3	5.3	11516
1-EA-42	170	100	-	7.0'	3.0	47008
1-42	205	120	-	7.4'	3.2	11507
2E-38N	300	205	70	11.8'	5.1	11508
3E-12N	500	337	210	17.3'	6.5	11509
3E-12NR	670	575	460	22.6	9.8	11510
3E-12R	525	490	450	25.9	11.2	38160
3E-34N	670	575	460	20.3'	8.8	11511

LITTLE GIANT CHEMICAL TRANSFER PUMPS

Magnetic Driven Pumps

Model 1-AA-MD

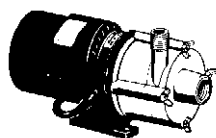
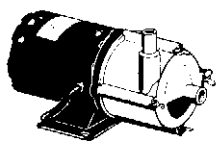
Employing a completely "seal-less" engineering concept, Little Giant Magnet Driven 316 stainless steel, corrosion-resistant shaft Centrifugal Pumps are specifically designed and Rulon-J thrust washers. Open shaded-to handle acids, alkalis, solvents and other pole motor has sleeve bearings. Impedance sophisticated fluid chemistry with efficiency protected. 3' lead wires with no plug. and trouble-free reliability.



FEATURES

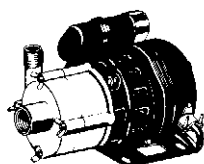
Except where notes, all units feature:

- * Titanium shaft and thrust washers for excellent wear and corrosion resistance.
- * High quality, permanent, uncoated ceramic (barium ferrite) driven magnet.
- * Glass-filled polypropylene pumping head and impeller.
- * Nitrile O-ring.



FLUID SYSTEM DESIGN PARAMETERS

- * Specific gravity: Up to 1.1
- * Viscosity: Up to 100 SSU (20CPS)
- * Ambient Air Temperatures: up to 77 Deg Far (24 Deg C)



NOTE: CONSULT FACTORY FOR APPLICATIONS WITH HIGHER AMBIENT TEMPERATURE, SPECIFIC GRAVITIES AND VISCOSITIES.

FLUID/MATERIALS IN CONTACT

Poly propylene, Titanium, Barium Ferrite and Nitrile.

Model 1-MD

1/2" OD smooth discharge and intake ports. Open fan-cooled motor has sleeve bearings. Thermally protected. 6' power cord with 3 prong molded plug.

Model 2-MD

1/2" threaded MNPT discharge, and 1/2" threaded FNPT intake ports. Pen fan-cooled motor has sleeve bearings. Thermally protected. 6' power cord with 3 prong molded plug.

Model 3-MDX

5/8" OD smooth discharge and intake ports. Open fan-cooled motor has sleeve bearings. Thermally protected. 6' power cord with 3 prong molded plug.

Model 4-MD

Same features as Model 3-MD with larger motor.

Model 5-MD

1/2" threaded FNPT intake ports. Open fan-cooled PSC motor has sleeve bearings. Thermally protected. 6' power cord with 3 prong molded plug.

MD Series Specifications																						
Model	Fig	Intake Size	Disc. Size	Motor					Motor Type	Max PSI	Shutt Off Head (Ft.)	Gallons Per Hour							Dimensions (In)			Wt. Packed Lbs.
				Hertz	RPM	HP	Watts	Amps				1'	3'	6'	9'	15'	18'	24'	HT.	WD.	LG.	
1-AA-MD*	11544	1/2" OD	1/2" OD	60	3250	1/200	16	.27	OPEN	2.35	5.4	160	100	-	-	-	-	-	3.7	2.4	4.4	1.5
1-MD*	11546	1/2" OD	1/2" OD	60	2450	1/70	60	.79	OPEN FC	4.6	10.6	180	165	90	20	-	-	-	5.0	4.0	8.3	4.0
2-MD	11548	1/2" FNPT	1/2" MNPT	60	3100	1/30	100	1.5	OPEN FC	6.3	14.6	510	465	410	330	-	-	-	4.3	4.0	8.5	4.0
				50	2600	1/30	105	1.7		4.5	10.5	470	420	350	200	-	-	-				
3-MDX	11551	5/8" OD	5/8" OD	60	3150	1/30	100	1.7	OPEN FC	6.6	15.2	445	415	360	295	-	-	-	4.3	4.0	8.3	4.0
				50	2850	1/30	95	1.5		4.8	11.1	415	385	290	180	-	-	-				
3-MI	11552	1/2" FNPT	1/2" MNPT	60	3300	1/20	105	1.4	OPEN FC	7.1	16.3	590	545	490	390	150	-	-	4.3	4.0	8.5	7.0
4-MD*	11554	1/2" FNPT	1/2" MNP	60	3250	1/12	213	2.4	OPEN FC	10.2	23.7	690	660	600	545	390	280	-	4.3	4.0	8.9	7.5
5-MD	11556	1/2" FNPT	1/2" MNP	60	3250	1/8	200	2.1	OPEN FC PSC	15.0	34.6	905	875	800	750	635	575	440	5.6	5.4	8.3	8.6
				50	2800	1/8	155	1.9		9.7	22.4	945	905	800	715	530	440	-				

LITTLE GIANT PUMPS

COLD WATER CONDENSATE PUMPS

An inexpensive, trouble-free solution to condensate removal where gravity drainage is impossible or impractical, Little Giant Automatic Condensate units are designed to fit most mechanical refrigeration and air conditioning units. Also for use in the disposal of waste water of Drinking Fountains, Humidifiers, Ice Makers, Beverage Machines and other applications.

Model 1-ABS

Designed for in-pan mounting, submersible pump has cast aluminum housing with protective epoxy coating, smooth intake and 1/4" MNPT discharge. Float operated switch is waterproof and engages pump in 1.06" of water, and disengages pump in .5" of water. Pump has 6' power cord, with 3 prong molded plug.

Model TKT

Nylon, corrosion-proof tank for use with Model 1-ABS pump unit. Kit consists of tank, check valve, and 20' of 1/4" tubing.

Model 2EC-SPT

Shallow pan tank unit for use where minimum height is a requirement. Pump has 1/4" MNPT discharge. Float operated switch engages pump in 2.25" of water, and disengages in 1.5" of water. Pump has 6' power cord with 3 prong molded plug.

Model 34C-SPT

Larger of the shallow pan tank units has greater pumping capacity. Pump has 1/2" MNPT discharge, 6' power cord with 3 prong molded plug. Pump engages in 4.45" of water, and disengages in 3.45" of water. Unit includes 3/8" check valve.

Suitable for High Efficiency Applications

For Condensate and waste water removal tasks, Little Giant vertical-pump Automatic Condensate Units are an efficient, low cost answer. Designed to fit most larger mechanical refrigeration and air conditioning units, these pump units also serve as excellent waste water disposal systems where increased volume is needed.

FEATURES

Except where noted, all units feature: Vertical type pump unit. Leakproof, rust-proof, high-impact polystyrene tank. ABS Motor & Tank cover, volute and impeller. Stainless steel shaft. Snap action Switch. 3/8" OD barbed discharge. 6' power cord with 3 prong molded plug. Thermal overload protection.

Model VCM-15UL

Pump engages in 2.40" of water, and disengages in 1.25" of water. Check valve. UL Listed.

Model VCM-15ULS

Same as above, but includes safety switch, and check valve. UL Listed.

Model VCM-20UL

Same as Model VCM-15UL above, with greater pumping capacity. Check Valve. UL Listed.

Model VCM-20ULS

Same as Model VCM-20UL, with safety switch, and check valve. UL Listed.

Model VCC-20ULS

Low-profile, compact size for limited space installations. Pump engages in 1" of water, and disengages in .45 of water. Includes safety switch and check valve.

Model VCL-14ULS

Pump engages in 3.56" of water, and disengages in 2.6" of water. Includes safety switch.

Model VCL-24UL

Same as above with larger motor. No safety switch. Thermally protected. UL Listed.

Model VCL-24ULS

Same as Model VCL-24UL above, with safety switch. UL Listed.

Model VCL-45S

Heavy duty pumping unit. Pump engages in 3.56" of water, and disengages in 2.6" of water. Will pump 75 GPH at 40' Head. 3' power cord, without plug. 3/8" OD copper tube discharge. Includes safety switch.

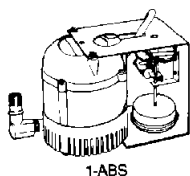
Coil Cleaning Kit

Model GKPK-SC

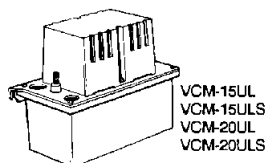
A fast inexpensive and effective system for "boiling out" coils, the Little Giant Coil Cleaning Kit is ideal for use with steam converters, burnouts, shell and tube head exchangers, water heaters and oil supply lines to fuel oil heaters. Used with coil cleaning acids. Kit includes 5 gallon polyethylene tank with cover and baffle, and Little Giant Model 2-MD-SC (Special Version #582523) magnet-driven pump with mounting bracket. Also includes 18" of 1/2" Tygon tubing, 10'.

	Gallons per hour @ 115 VAC 60 HZ			SHUT OFF	PSI	FIG. NO.
	1'	5'	9'			
1-ABS	205	145	-	10'	4.3	11517
VCC-20ULS	70*	55*	-	20'	8.6	43186
VCM-15UL(S)	50*	30*	-	15'	6.5	30238
VCM-20UL(S)	701*	55*	-	20'	8.6	38162
VCL-14UL(S)	170	125	-	14'	6.1	16965
VCL24-UL(S)	250	210	105	24'	10.4	30244
VCL-45S	440	415	330	45'	10.5	30245
GKPK-SC	310	285	225	14.6'	6.5	18146

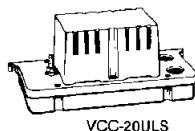
*GPH RATES SHOWN ARE WITH CHECK VALVES.



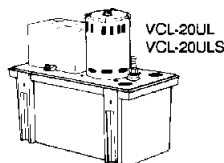
1-ABS



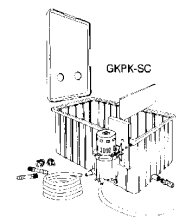
VCM-15UL
VCM-15ULS
VCM-20UL
VCM-20ULS



VCC-20ULS



VCL-20UL
VCL-20ULS



GKPK-SC

PUMPS

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BARNES PUMPS

THRUSH

Bell & Gossett
ITT Fluid Technology Corporation

TACO

AUROMA

BARNES PUMPS

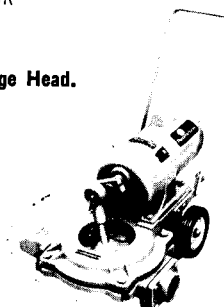
PERFORMANCE

MODEL NO.	HEIGHT OF PUMP ABOVE WATER				
	5'	10'	15'	20'	25'
20ADG	3760	3720	3600	3480	3420
30ADG	4380	4080	3960	3840	3780
30ADD	4380	4080	3960	3840	3780
4CDG	8000	8000	6000	4000	2000
2CDE	3000	2500	2000	1500	1250
3CDE	6000	5500	4500	3500	3000
4CDE	8000	8000	6000	4000	2000
20CDE	1680	1560	1320	1140	900

U.S. GALLONS PER HOUR

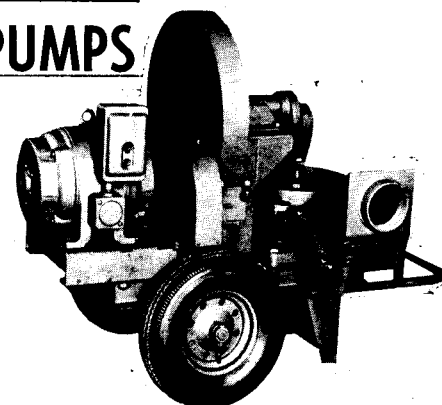
NOTE: Above Performance Based on 10' Static Discharge Head.

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610-275-4453



mud 'n sludge

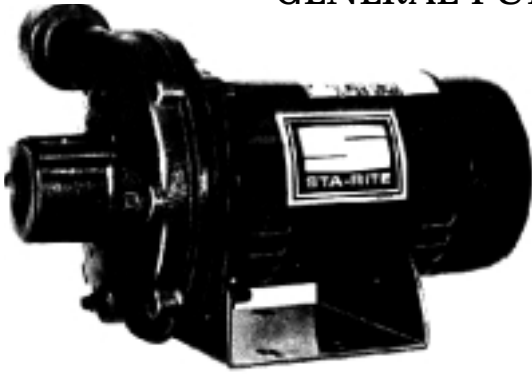
DIAPHRAGM PUMPS



- * 2", 3" and 4" sizes with capacities to 8,000 GPH to handle slurry, sludge and residue.
- * Lightweight, compact, minimum overall dimensions.
- * Economical—low original cost, easy maintenance.
- * Flexible coupled engine for easy replacement.
- * Simple construction—enclosed gear reduction, hardened, heat-treated and ground shaft, heavy-duty bearings on pump shaft and plunger crank.
- * Easy diaphragm replacement without disturbing suction or discharge lines.
- * Free-opening flap valves—large rubber-faced swing-type valves offer easy passage of foreign materials.

For additional information call: 610-275-4453 or Fax: 610-279-6299
Please call for current prices.

GENERAL PURPOSE CENTRIFUGAL PUMPS



J Series pump and other Sta-Rite centrifugal pumps can be ordered with 50 cycle motors and with other design characteristics. Call Duff for complete information on Sta-Rite centrifugal pumps for specific applications.. on other equipment... or for any specific installation requirements.

***1/3 to 2 1/2 HP** - in either high head or medium head models, with heavy duty motors, easy service design, four position discharge and air volume control tapping.

***Easy Serviceability** - All models include replaceable wear ring and feature back pull-out design.

***Medium Head** - Models deliver up to 110' of head with capacities to 140 GPM.

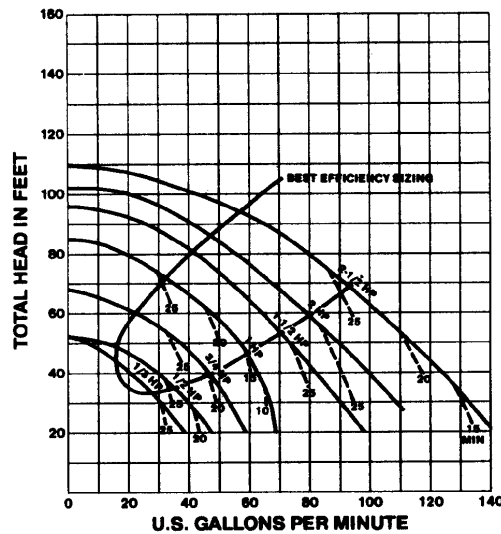
***High Head** - Models deliver up to 140' of head with capacities to 90 GPM.

***J Series Feature Lexan Impellers** - Abrasion-resistant for normal applications, with working temperatures to 140 Deg. F.

***JB Series Feature Brass Impellers** - for temperature applications up to 225 deg F. (JB Pumps als equipped with high temperature shaft seals.

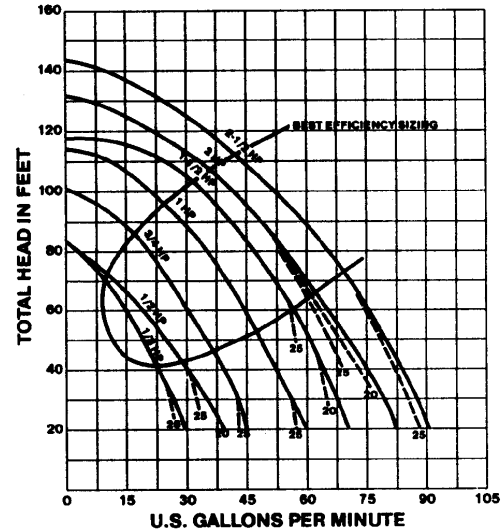


MEDIUM HEAD



NOTE: Dotted lines indicate performance reduction at high suction lift.

HIGH HEAD

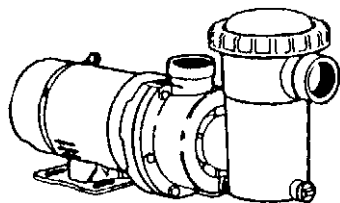


MEDIUM HEAD

HP	Lexan Impeller	Brass Impeller	Motor Voltage	Phase	Suct.	Disch.	Price
1/3	10060	10552	115/230	1	1	1"	
1/2	10121	10575	115/230	1	1/4"	1"	
1/2	10434	10581	230/460	3	1	1"	
3/4	10440	10587	115/230	1	1/4"	1"	
3/4	10446	10593	230/460	3	1	1"	
1	10456	10596	115/230	1	1/4"	1"	
1	10468	10599	230/460	3	1	1"	
1 1/2	10476	10603	115/230	1	1/4"	1"	
1 1/2	10484	10611	230/460	3	1	1"	
2	10492	10615	115/230	1	1/4"	1"	
2	10504	10618	230/460	3	1	1/4"	

HIGH HEAD

HP	Lexan Impeller	Brass Impeller	Motor Voltage	Phase	Suct.	Disch.	Price
1/3	9799	9869	115/230	1	1	1"	
1/2	9814	9877	115/230	1	1/4"	1"	
1/2	9819	9881	230/460	3	1	1"	
3/4	9822	9898	115/230	1	1/4"	1"	
3/4	9828	9907	230/460	3	1	1"	
1	9832	9913	115/230	1	1/4"	1"	
1	9836	9921	230/460	3	1	1"	
1 1/2	9845	9925	115/230	1	1/4"	1"	
1 1/2	9847	9930	230/460	3	1	1"	
2	9853	49020	115/230	1	1/4"	1"	
2	9856	49021	230/460	3	1	1/4"	
2 1/2	9858	10036	115/230	1	1/4"	1"	
2 1/2	9864	10052	230/460	3	1	1/4"	



**EASY RING-LOK
BASKET STRAINER**

JACUZZI PUMPS

POOL, SPA & CHEMICAL TRANSFER

This self-priming centrifugal pump is suitable for use with saltwater, chemical transfer, and other applications that deal with corrosive substances.

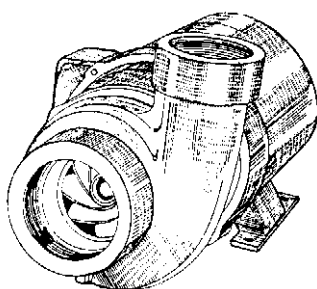
Pumps available 1/2 HP through 3 HP.

115/230 Single Phase

208-230/460 Three Phase

MAGNUM *Plus*

Cygnat



POOL, SPA & CHEMICAL TRANSFER

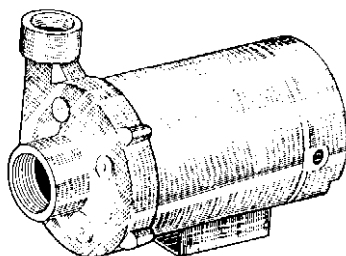
This flooded suction centrifugal pump is suitable for use with saltwater, chemical transfer and other applications that deal with corrosive substances.

1-1/2" MPT fits to accept a standard Jacuzzi union or male pipe thread.

Pumps available 3/4 HP through 2 HP.

115 volts.

STINGRAY

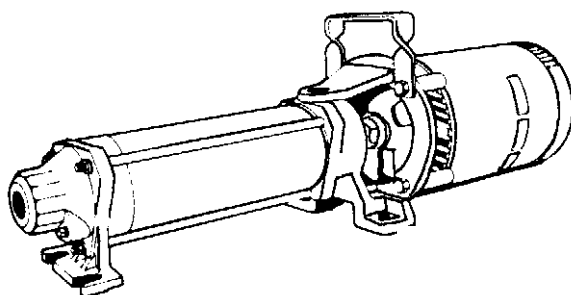


END SUCTION CENTRIFUGAL PUMP

For general industrial use, transfer, circulation or booster service. Available in ratings from 1/3 HP to 50 HP with capacities through 650 GPM and heads to 300 feet.

Heavy duty cast iron construction mechanical shaft seal handles. Water temperature up to 212°F.

All voltages available.



HIGH PRESSURE BOOSTER PUMP

This multi-purpose pump is ideal for boosting water pressure around the home, industry or farm and is constructed with field-proven SandHandler hydraulics. Available in a variety of sizes for many applications 1/3-3HP and 5, 10, 18 and 25 GPM performance ranges.

Making a Difference.

JACUZZI®

BERKLEY PUMPS

CENTRIFUGAL PUMPS

Berkeley provides a complete line of motor driven centrifugal pumps, water-cooled and air-cooled engine driven pumps, belt and coupling drives, and Tracto-Rain pumps for use with tractor power take-offs. Capacities up to 3700 GPM. These centrifugal pumps are also available in modified designs with special materials, or can be custom designed and manufactured to meet specific application requirements. The reliability of Berkeley centrifugals has been proved in thousands of installations.



VERTICAL AND SUBMERSIBLE TURBINES

The Berkeley deepwell turbine line includes the 3450 RPM Cavalier, vertical turbine fire pumps listed by Underwriters Laboratories (with 500 to 2500 GPM capacities) and enclosed line oil-lubricated, or open line water-lubricated shaft types. Submersible Turbines for 6 inch and larger wells are also available. Dependable Berkeley turbines meet the most rigid requirements for agricultural, commercial, industrial and municipal applications.



DEEPWELL TURBINES

For 4 to 24 Inch Wells

Capacities from 25 to 12,000 gallons per minute, at pumping levels to 1000 feet deep. Water-lubricated open line and oil-lubricated enclosed line shafts. Motor, pulley and gear drives, and combination drives also available.



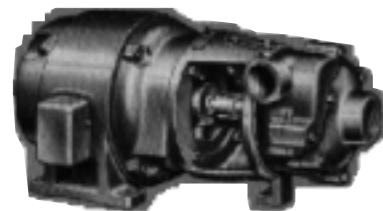
NON-CLOG PUMPS

Available for wet pit installation in conventional and submersible types. For dry pit applications available for motor, engine, belt or coupling drive. Suction and discharge from 2 1/2" to 6", Motors to 15 HP.



PTO PUMPS

Trailer mounted pumping units powered by tractor takeoff. Pump may be tailored to application by choice of 5 step-up drive sizes. Capacities 300 to 2200 GPM with pressures up to 100 psi. Designed specifically for sprinkler and flood irrigation applications. In 3" through 6" sizes.



2-STAGE CENTRIFUGAL

Higher pressures for fire, industrial, farm and general application. Motor, belt, or engine drive. Capacities 30 to 400 GPM with heads up to 650 feet, 1 to 40 HP. Maximum case pressures from 250 to 350 psi.



GRUNDFOS SERIES C CENTRIFUGAL PUMP

Boiler Feed Water and Condensate Return * Dearation * Jockey Pumps for Fire Protection
 * Water Treatment: RO, DI and Filtration * Car Wash Systems * Electronic Manufacturing
 * Parts Washers * Lumber and Mining * Petrochemical: Refinery and Offshore

Available 1/2 HP through 40 HP
 Available 5-400 gpm



TEFC AVAILABLE!

ALL VOLTAGES AVAILABLE!

GRUNDFOS VERSAFLO UPS, TP, LM & LP SERIES INLINE CIRCULATOR



HVAC * Cooling Towers * Food Processing - Cooling * Agriculture *
 Greenhouse & Hydroponics * Liquid Transfer * Commercial -
 Industrial * Boiler Condensate * HVAC Hot and Chilled Water * Hot
 water Recirculation * Industrial Applications

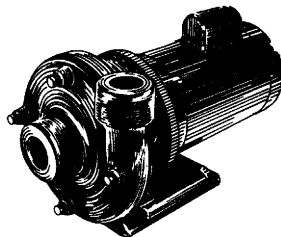
Available 1/2 HP through 20 HP
 Available 25-380 gpm



TEFC AVAILABLE!

ALL VOLTAGES AVAILABLE!

GRUNDFOS SERIES HS CENTRIFUGAL PUMP



Water Circulation * Booster Service * Liquid Transfer * Air Conditioning * Water
 Supply * Filter Systems * Water Fountains * Cooling Machinery * Light
 Irrigation

Available 1/2 HP through 7-1/2 HP
 Available 10-180 gpm

**OPEN DRIP PROOF & TEFC
MOTORS AVAILABLE!**

ALL VOLTAGES AVAILABLE!

GRUNDFOS®

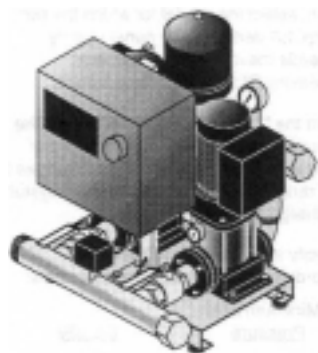


Leaders in Pump Technology

BOOSTERPAQ

For Booster Applications

High-pressure booster systems



GRUNDFOS®

Leaders in Pump Technology



BOOSTER PUMPS

BoosterpaQ Features/Benefits

- **Grundfos MGE, integrated variable frequency drive motors** - Provide much better system efficiency and pressure regulation than constant speed systems which use pressure control valves. MGE motors do not require a separate VFD package and are very quiet and compact.
- **PFU2000/9 controller** - It is extremely simple to set the BoosterpaQ operating pressure. Simply adjust the potentiometer mounted on the PFU2000/9 until the pressure gauge reads the required pressure and your system is ready to maintain constant pressure over a wide range of flow demands. The inlet pressure switch provides low suction pressure and dry run protection. System status is easy to interpret (2 LEDs on the front panel), and an output alarm relay will trigger your alarm when the system needs attention.
- **Control Panel** - The control panel is CUL Listed. The enclosure standard is NEMA 3R, options available.
- **Grundfos vertical centrifugal pumps** - Grundfos multi-stage centrifugal pumps, models CRU (304 stainless and cast iron wetted parts) and CRNG (316 stainless wetted parts), provide a very small foot print package while offering high boosting pressures.
- **Two system configurations offered as standard** - All models feature stainless steel base frame and control panel mount and a diaphragm tank. In addition, you select from either of the following standard system configurations:

Grundfos CRU model pumps with 304 stainless steel materials for piping, manifolds, and valves or:

Grundfos CRNG model pumps with all 316 stainless steel materials for piping, manifolds, and valves.
- **Outdoor protective housing** - Available as an option.

COMPACT MULT-STAGE CENTRIFUGAL PUMPS FOR MACHINE TOOL COOLANTS, EDM, INDUSTRIAL PARTS WASHERS AND BOILER CONDENSATE APPLICATIONS



SPK/CRK/CHK

Model Range

Models	HP Range	Discharge	Flow Range (GPM)
CHK2	1/2, 3/4, 1, 1-1/2, 2	3/4"	1.2-16
CHK4	3/4, 1, 1-1/2, 2,	3/4"	3-40
SPK1	1/6, 1/4, 1/3, 1/2, 3/4, 1, 1-1/2	1-1/4"	1-8
SPK2	1/6, 1/4, 1/3, 1/2, 3/4, 1, 1-1/2	1-1/4"	3-13
SPK4	1/6, 1/4, 1/3, 1/2, 3/4, 1, 1-1/2	1-1/4"	9-26
SPK8	1/3, 1/2, 3/4, 1, 1-1/2	1-1/4"	20-50
CRK2	1/2, 3/4, 1, 1-1/2, 2, 3, 5	1-1/4"	1.2-20
CRK4	1/2, 3/4, 1-1/2, 2, 3, 5	1-1/4"	3-40
CRK8	3/4, 1, 1-1/2, 3, 5, 7-1/2, 10, 15	2"	5.3-65
CRK16	2, 5, 7-1/2, 10, 15, 20, 25	2"	8.5-115

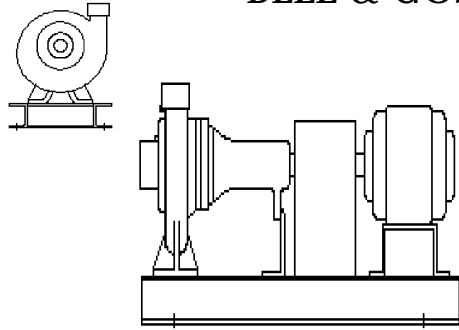
* 3/4" for SPK Mini

Materials of Construction

Description	Material
Shaft	431 Stainless Steel (SPK/CHK)
	316 Stainless Steel (CRK)
Impeller, Chambers, Suction Interconnector, Priming Screw, Strainer and Straps	304 Stainless Steel
Motor Stool, Coupling	Cast Iron*
	(304 S.S. optional some models)
Seal Faces (CRK)	Carbon/Tungsten Carbide
Seal Faces (SPK, CHK)	Carbon/Ceramic
Intermediate Bearing	Ceramic
Bearing Rings	Tungsten Carbide
Impeller Seal Ring, Neck Ring (CHK)	Ryton®/Teflon®
O-Ring	FPM

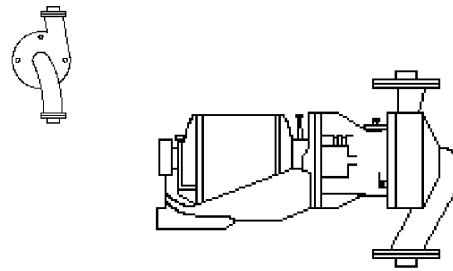
Ryton® is a registered trademark of Phillips Petroleum.
Teflon® is a registered trademark of Dupont.

BELL & GOSSETT ITT CENTRIFUGAL PUMPS



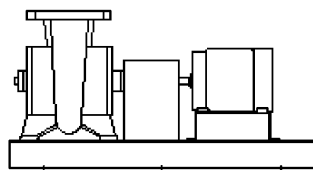
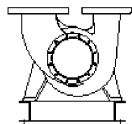
B&G Series 1510 Pumps
to 2500 GPM, 400 ft. Head, 100 HP

Single stage, vertical split-case design. Can be used for open or closed systems. Seal options: standard mechanical, flushed single or double and packing.



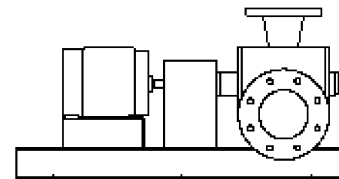
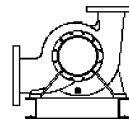
B&G Series 80 In-Line Pumps
to 2500 GPM, 375 ft. Head, 60 HP

Compact vertical design saves space. Vertical or horizontal mounting in pipe saves installation time. Seal options: standard mechanical, flushed single or double and packing.



B&G Series VSC Pumps
to 4000 GPM, 400 ft. Head, 200 HP

Single stage, double suction pump, saves up to 50% of floor space. Cuts piping requirements. Easily serviced without disturbing volute or motor. Seal options: standard mechanical, flushed single or double and packing.



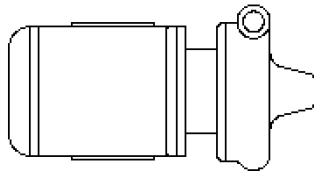
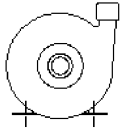
B&G Series VSCS PUMPS
to 8000 GPM, 300 ft. Head, 2500 HP

Single stage, double suction pump same as VSC series except with side suction and top discharge.

ITT Bell & Gossett
ITT Fluid Technology Corporation

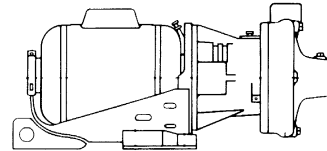
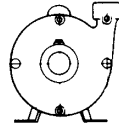
**CALL DUFF NOW FOR YOUR
PRICING AND AVAILABILITY!
610-275-4453**

BELL & GOSSETT ITT CENTRIFUGAL PUMPS



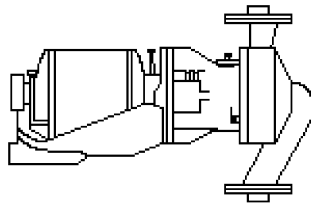
B&G Series 1535 Pumps to 2300 GPM, 400 ft. Head, 50 HP

Uni-built close-coupled pump ruggedly constructed. Heavy duty motor has extra large shaft and oversized ball bearings and is available as open, enclosed or explosion-proof units. Serviceable without breaking pipe connections. Seal options: standard mechanical, flushed single or double and packing.



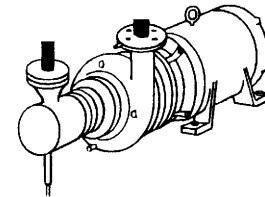
B&G Series 1522 Pumps to 140 GPM, 110 ft. Head, 2 HP

Ideal pump for cooling lower circulation and other refrigeration applications. Also extensively used as water pressure booster and industrial pumping duties. Amazingly quiet. Both pump and motor have bronze sleeve bearings. Time proven mechanical seal ends leakage troubles.



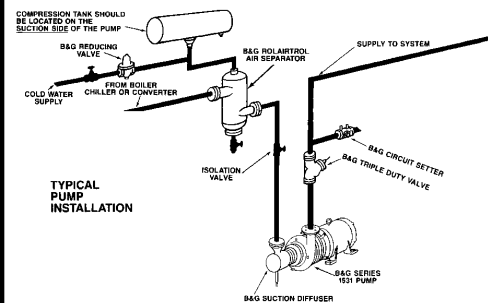
B&G Series 60 In-Line Pumps to 140 GPM, 56 ft. Head, 2 HP

Compact space saving design with many exclusive B&G features. Quality sleeve bearing construction assures quiet trouble-free operation. Vertical split case construction design provides easy servicing. In-line mounting simplifies installation.

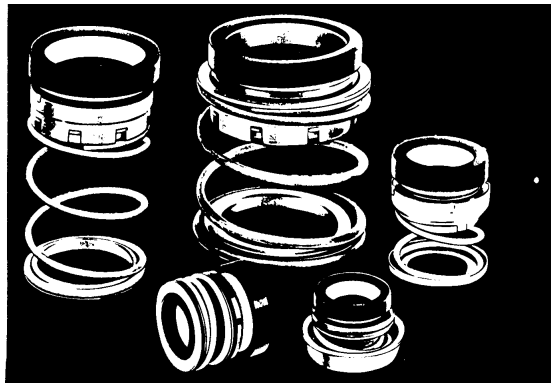


B&G Series 1531 Pumps to 2300 GPM, 400 ft. Head, 50 HP

Uni-built close coupled pump ruggedly constructed. Heavy duty motor has extra large shaft and oversize ball bearings and is available as open, enclosed or explosion proof units. Serviceable without breaking pipe connections. Seal options: standard mechanical, flushed single or double and packing.



U S SEALS



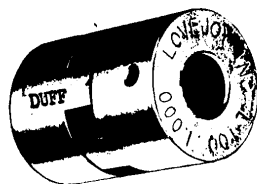
**COMPLETE STOCK!
CALL WITH YOUR
REQUIREMENTS!
WE CAN MATCH ANY SAMPLE!**

COME VISIT US!

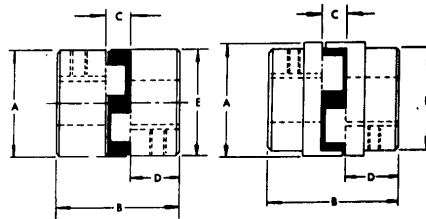
**YOU ARE ALWAYS WELCOME AT
DUFF COMPANY!
201 EAST LAFAYETTE STREET
NORRISTOWN, PA**



LOVEJOY COUPLINGS



TYPE L



Style 1

Style 2

*Must have shaft size
of driver and driven!*

**SEE
HEATING
SECTION
FOR
WOODS
AND B&G
COUPLINGS**

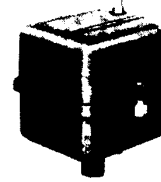
Style #	BORE		DIMENSION IN INCHES					Complete Coupling		Spider	
	Min	Max	Outside Dia (A)	Overall Length (B)	Distance bwn flanges (C)	Length thru bore (D)	Hub Dia (E)	Fig. No.	Price	Fig. No.	Price
1	1/8	3/8	5/8	13/16	9/32	17/64	5/8	10779		10788	
1	1/4	5/8	1 5/64	1 23/32	15/32	5/8	1 5/64	10783		10790	
1	1/4	3/4	1 23/64	2	1/2	3/4	1 23/64	10786		10793	
1	1/4	7/8	1 3/4	2 1/8	1/2	13/16	1 3/4	10752		10797	
1	1/4	1	2 7/64	2 1/8	1/2	13/16	2 7/64	47660		39908	
1	7/16	1 1/8	2 7/64	2 1/2	1/2	1	2 7/64	10756		10799	
1	1/2	1 3/16	2 17/32	2 7/8	3/4	1 1/16	2 17/32	10762		10802	
1	1/2	1 3/8	2 17/32	3 1/2	3/4	1 3/8	2 17/32	10763		10807	
1	5/8	1 5/8	3 5/16	4 1/4	7/8	1 11/16	3 5/16	10769		10809	
1	5/8	1 7/8	3 3/4	4 1/2	1	1 3/4	3 3/4	10772		10813	
2	3/4	2 1/8	4 1/2	5 1/4	1	2 1/8	4	10775		10816	
2	3/4	2 5/8	5	6	1	2 1/2	4 1/4	10778		10819	

For additional information call: 610-275-4453 or Fax: 610-279-6299
Please call for current prices.

PUMPTROL

PUMPTROL® COMMERCIAL/LIGHT INDUSTRIAL PRESSURE SWITCHES - TYPES G

Reference Page #CP8-16 - Square D Mini Catalogue
INDIVIDUALLY BOXED



PART NUMBER

CLASS	TYPE	CODE	FORM	PRES SETTING		CONNECTION/DESCRIPTION
				CLOSE	OPEN	
9013	GHG2	J25		60	- 80	1/4" FPT-EEMAC 1 - GENERAL PURPOSE
9013	GHG2	J30	R	80	- 100	1/4" FPT-EEMAC 1 - REVERSE ACTION
9013	GHG5	J65		215	- 250	1/4" FPT-EEMAC 1 - GENERAL PURPOSE
9013	GHB2	J30		80	- 100	1/4" FPT-EEMAC 3R - RAINPROOF
9013	GHG2	J30		80	- 100	1/4" FPT-EEMAC 1 - GENERAL PURPOSE
9013	GHG2	J51	R	100	- 80	1/4" FPT-EEMAC 1 - GEN PUR - REVERSE ACTION
9013	GHG2	J30	X	80	- 100	1/4" FPT-EEMAC 1 - TWO WAY PRES. RELEASE
9013	GHR2	J30		80	- 100	1/4" FPT-EEMAC 7 & 9 - HAZARDOUS LOCATIONS
9013	GHW2	J30		80	- 100	1/4" FPT-EEMAC 4 - WATERTIGHT
9013	GSB2	J24		40	- 60	1/4" FPT-EEMAC 3R - RAINPROOF
9013	GSG2	J20		20	- 40	1/4" FPT-EEMAC 1 - GENERAL PURPOSE
9013	GSG2	J21		30	- 50	1/4" FPT-EEMAC 1 - GENERAL PURPOSE
9013	GSG2	J24		40	- 60	1/4" FPT-EEMAC 1 - GENERAL PURPOSE
9013	GSG2	J24	R	40	- 60	1/4" FPT-EEMAC 1 - REVERSE ACTION
9013	GSG2	J25		60	- 80	1/4" FPT-EEMAC 1 - GENERAL PURPOSE
9013	GSG2	J99	R	60	- 40	1/4" FPT-EEMAC 1 - REVERSE ACTION
9013	GSG2	J24	X	40	- 60	1/4" FPT-EEMAC 1 - TWO WAY PRES. RELEASE
9013	GSR2	J20		20	- 40	1/4" FPT-EEMAC 7 & 9 - HAZARDOUS LOCATIONS
9013	GSR2	J24		40	- 60	1/4" FPT-EEMAC 7 & 9 - HAZARDOUS LOCATIONS
9013	GSW2	J24		40	- 60	1/4" FPT-EEMAC 4 - WATERTIGHT

ACCESSORIES

9998PC205

9998PC208

CONTACTS - GHG, GSG, GHR, GSR, GMG

DIAPHRAGM ASSEMBLY - GHG, GSG

FLOAT SWITCHES - TYPE D - OPEN TANK OR SUMP - CLASS 9035

Reference Page #CP8-23 - Square D Mini Catalogue
INDIVIDUALLY BOXED



PRICE UPON REQUEST

FLOAT SWITCHES - TYPES D & G - OPEN TANK OR SUMP - CLASS 9036

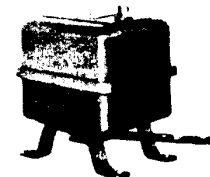
Reference Page #CP8-24 - Square D Mini Catalogue
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PART NUMBER

CLASS	TYPE	CODE	FORM	CONNECTION/DESCRIPTION
9036	DG2			EEMAC 1 - CONTACTS CLOSE ON LIQUID RISE
9036	DG2		R	EEMAC 1 - CONTACTS OPEN ON LIQUID RISE
9036	GG2			EEMAC 1 - CONTACTS CLOSE ON LIQUID RISE
9036	GG2		R	EEMAC 1 - CONTACTS OPEN ON LIQUID RISE
9036	DW31			EEMAC 4 - CONTACTS CLOSE ON LIQUID RISE
9036	GW1			EEMAC 4 - CONTACTS CLOSE ON LIQUID RISE
9036	DR31			EEMAC 7 & 9 - CONTACTS CLOSE ON LIQUID RISE
9036	GR1			EEMAC 7 & 9 - CONTACTS CLOSE ON LIQUID RISE

ACCESSORIES

9049	A6C	7" CENTER HOLE #304 S.S. FLOAT, 5' BRASS TUBING
9049	A6CA	7" CENTER HOLE #304 S.S. FLOAT, 5' ALUM TUBING
9049	A6CS	7" CENTER HOLE #316 S.S. FLOAT, 5' S.S. TUBING
9049	A6	7" TAPPED AT TOP #304 S.S. FLOAT, 5' BRASS TUBING
9049	A6A	7" TAPPED AT TOP #304 S.S. FLOAT, 5' ALUM TUBING
9049	T1A	2 1/2' ALUM TUBING AND CONNECTOR
9049	T1	2 1/2' BRASS TUBING AND CONNECTOR
9049	T1S	2 1/2" S.S. TUBING AND CONNECTOR



LEVEL CONTROLS

MECHANICAL ALTERNATORS - TYPES B & C - CLOSED TANK - CLASS 9038

Reference Page #CP8-30 - Square D Mini Catalogue

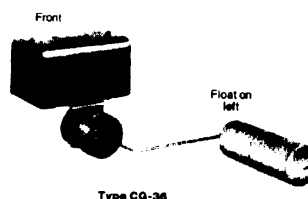
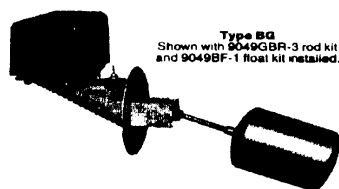
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PART NUMBER

CONNECTION/DESCRIPTION

CLASS TYPE CODE FORM

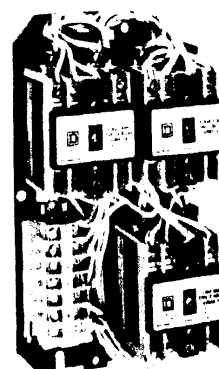
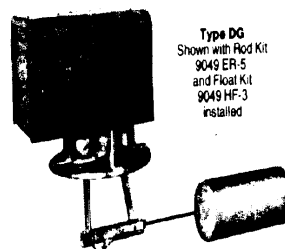
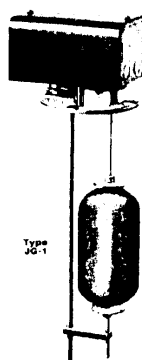
9038	BG	21	EEMAC 1 - FLANGED MOUNTED WITH BELLOWS SEAL
9038	BW	21	EEMAC 4 - FLANGED MOUNTED WITH BELLOWS SEAL
9038	CG	31	EEMAC 1 - 2 1/2" MPT CONN. FLOAT TO RIGHT
9038	CG	32	EEMAC 4 - 2 1/2" MPT CONN. FLOAT TO LEFT
9038	CW	31	EEMAC 4 - 2 1/2" MPT CONN. FLOAT TO RIGHT
9049	BF1		#304 STAINLESS STEEL FLOAT
9049	BF2		#316 STAINLESS STEEL FLOAT
9049	GBR11		11" BRASS ROD
9049	GBR3		3" BRASS ROD
9049	GBR5		5" BRASS ROD
9049	GSR3		3" STAINLESS ROD
9049	GSR5		5" STAINLESS ROD

MECHANICAL ALTERNATORS - TYPES D & J - CLOSED TANK - CLASS 9038
ELECTRIC ALTERNATORS - TYPE X - CLASS 9039

Reference Page #CP8-31, CP8-32 & CP8-33 - Square D Mini Catalogue

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PRICES UPON REQUEST



FLOATLESS LIQUID LEVEL CONTROL SYSTEMS



Provides automatic low level cut-off protection for submersible pumps and deep well turbines. Liquid level submersible pump control system consists of a standard enclosed type LH induction relay which operates from two type E1-S insulated electrodes suspended at desired levels. Properly installed, these components provide reliable automatic low level cut-off protection for submersible pumps and deep well turbines. Permits efficient operation at full capacity and eliminates danger of pumping air or sand.

TYPE LH RELAY - The LH Relay is rated 1 H.P. Single Phase, 110 or 220 volts and normally furnished in a Nema 1 Metal Enclosure. For control of a larger motor it can be used in conjunction with a magnetic starter that has overload protection.

TYPE DH RELAY - The DH Relay is a two way control system for pump up or pump down. Rated at H.P. Single Phase, 115 or 230 volts A

PART NO.	MODEL #	LINE VOLTAGE	SECONDARY COIL VOLT	DESCRIPTION/OPERATION
LH-115	1500-C-L1-S8-NI-X	110/120V	360V AC	PUMP DOWN-SUBMERSIBLE
LH-230	1500-C-L2-S8-NI-X	208/240V	360V AC	PUMP DOWN-SUBMERSIBLE
RH-115	1500-D-L1-S8-NI-X	110/120V	360V AC	PUMP UP - OPEN SYSTEM
RH-230	1500-D-L2-S8-NI-X	208/240V	360V AC	PUMP UP - OPEN SYSTEM
DH-115	1500-G-L1-S8-NI-X	110/120V	360V AC	PUMP UP/DOWN-SUBMERSIBLE & OPEN
DH-230	1500-G-L2-S8-NI-X	208/240V	360V AC	PUMP UP/DOWN-SUBMERSIBLE & OPEN

FLOAT SWITCHES

FLOAT SWITCHES - TYPES D, E - CLOSED TANK - CLASS 9037

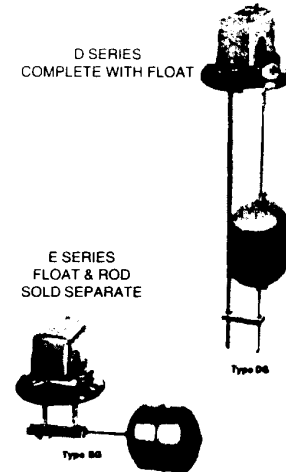
Reference Page #CP8-26 - Square D Mini Catalogue

INDIVIDUALLY BOXED

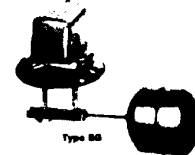
PART NUMBER

CLASS	TYPE	CONNECTION/DESCRIPTION
9037	DG1	EEMAC 1 - CONTACTS CLOSE ON LIQUID RISE
9037	DG2	EEMAC 1 - CONTACTS CLOSE ON LIQUID RISE
9037	DW1	EEMAC 4 - CONTACTS CLOSE ON LIQUID RISE
9037	DW2	EEMAC 4 - CONTACTS CLOSE ON LIQUID RISE
9037	DR1	EEMAC 7 & 9 - CONTACTS CLOSE ON LIQUID RISE
9037	DR2	EEMAC 7 & 9 - CONTACTS CLOSE ON LIQUID RISE
9037	EG8	EEMAC 1 - CONTACTS CLOSE ON LIQUID RISE
9037	EW8	EEMAC 4 - CONTACTS CLOSE ON LIQUID RISE
9037	ER8	EEMAC 7 & 9 - CONTACTS CLOSE ON LIQUID RISE
9049	EF1	#304 S.S. FLOAT
9049	EF2	#316 S.S. FLOAT
9049	ER3	3 1/4" STAINLESS STEEL ROD
9049	ER7	7 1/4" STAINLESS STEEL ROD

D SERIES
COMPLETE WITH FLOAT



E SERIES
FLOAT & ROD
SOLD SEPARATE

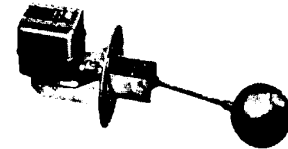


FLOAT SWITCHES - TYPES G - CLOSED TANK - CLASS 9037

Reference Page #CP8-27 - Square D Mini Catalogue

PART NUMBER - INDIVIDUALLY BOXED

CLASS	TYPE	CONNECTION/DESCRIPTION
9037	GG21	EEMAC 1 - CONTACTS OPEN ON LIQUID RISE
9037	GG22	EEMAC 1 - CONTACTS OPEN ON LIQUID RISE
9037	GW21	EEMAC 4 - CONTACTS OPEN ON LIQUID RISE
9037	GR21	EEMAC 7&9-CONTACTS OPEN ON LIQUID RISE
9049	GBR3	3" BRASS ROD
9049	GBR5	5" BRASS ROD
9049	GF1	4" DIAMETER BALL FLOAT #304 S.S.
9049	GF2	#316 STAINLESS STEEL FLOAT
9049	GSR3	3" STAINLESS STEEL ROD
9049	GSR5	5" STAINLESS STEEL ROD



FLOAT SWITCHES - TYPES H - CLOSED TANK - CLASS 9037

Reference Page #CP8-28 - Square D Mini Catalogue

PART NUMBER - INDIVIDUALLY BOXED

CLASS	TYPE	CODE	FORM	CONNECTION/DESCRIPTION
9037	HG33			EEMAC 1 - CONTACTS CLOSE ON LIQUID RISE
9037	HG33	R		EEMAC 1 - CONTACTS OPEN ON LIQUID RISE
9037	HG31			EEMAC 1 - CONTACTS CLOSE ON LIQUID RISE
9037	HG31	R		EEMAC 1 - CONTACTS OPEN ON LIQUID RISE
9037	HG34			EEMAC 1 - CONTACTS CLOSE ON LIQUID RISE
9037	HG37			EEMAC 1 - CONTACTS CLOSE ON LIQUID RISE
9037	HR33			EEMAC 7 & 9 - CONTACTS CLOSE ON LIQUID RISE
9037	HW33			EEMAC 4 - CONTACTS CLOSE ON LIQUID RISE
9049	HF3			#304 STAINLESS STEEL FLOAT
9049	HF4			#316 STAINLESS STEEL FLOAT

H SERIES
COMPLETE WITH FLOAT

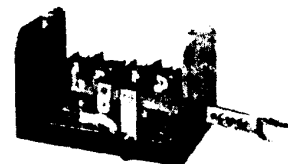


MECHANICAL ALTERNATORS - TYPES A - OPEN TANK - CLASS 9038

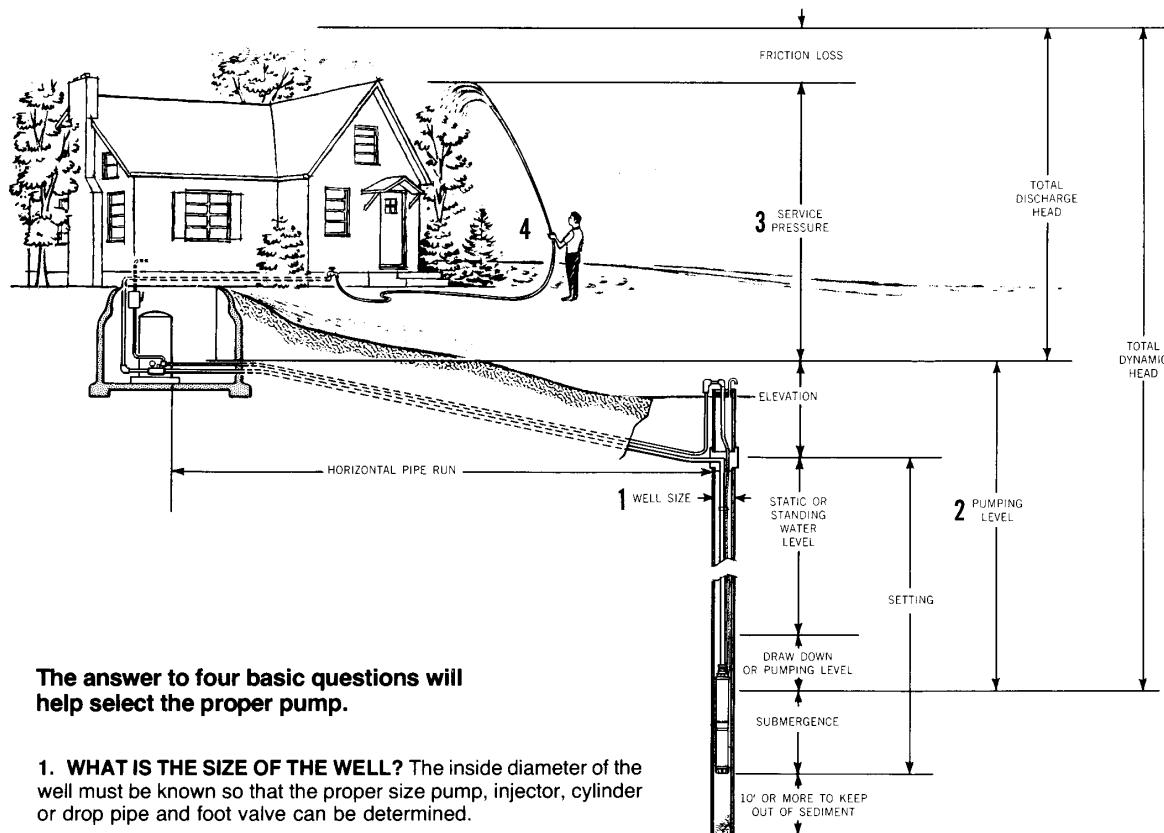
Reference Page #CP8-29 - Square D Mini Catalogue

PART NUMBER - INDIVIDUALLY BOXED

CLASS	TYPE	CODE	FORM	CONNECTION/DESCRIPTION
9038	AG1			EEMAC 1 - FLOAT OPERATED ALTERNATOR
9038	AW1			EEMAC 4 - FLOAT OPERATED ALTERNATOR
9038	AG1N5			EEMAC 1 - FLOAT OPERATED ALTERNATOR WITH HIGH WATER ALARM CIRCUIT
9049	UMS1			UNIVERSAL MOUNTING BRACKET
9049	A15			COMPENSATING SPRING



HOW TO SELECT THE CORRECT SUBMERSIBLE PUMPING EQUIPMENT



The answer to four basic questions will help select the proper pump.

1. WHAT IS THE SIZE OF THE WELL? The inside diameter of the well must be known so that the proper size pump, injector, cylinder or drop pipe and foot valve can be determined.

2. WHAT IS THE PUMPING LEVEL? The vertical distance in feet from the pump to the water level while the pump is operating. If the pump is installed away from the well and is on higher ground, this elevation must also be included. Most wells draw down while being pumped so this must not be confused with the standing water level.

3. WHAT SHOULD BE THE AVERAGE DISCHARGE PRESSURE? Usual average discharge pressure is 30 lbs.—halfway between the 20 lb. to 40 lb. switch setting of most water systems. When the tank is installed away from the pump at a higher level, or when house or yard fixtures are above the pump and tank, a greater pressure is needed and a larger pump must be used.

4. WHAT CAPACITY IS REQUIRED? The discharge capacity of the pump in gallons per hour that is needed for satisfactory service. The pump should have enough capacity so that it does not need to work more than the equivalent in intermittent service of 2 hours per day. See table of water requirements at right.

AVERAGE WATER REQUIREMENTS FOR GENERAL SERVICE AROUND THE HOME AND FARM

Each person per day, for all purposes	75 gal.
Each horse, dry cow or beef animal	12 gal.
Each milking cow	35 gal.
Each hog per day	4 gal.
Each sheep per day	2 gal.
Each 100 chickens per day	4 gal.

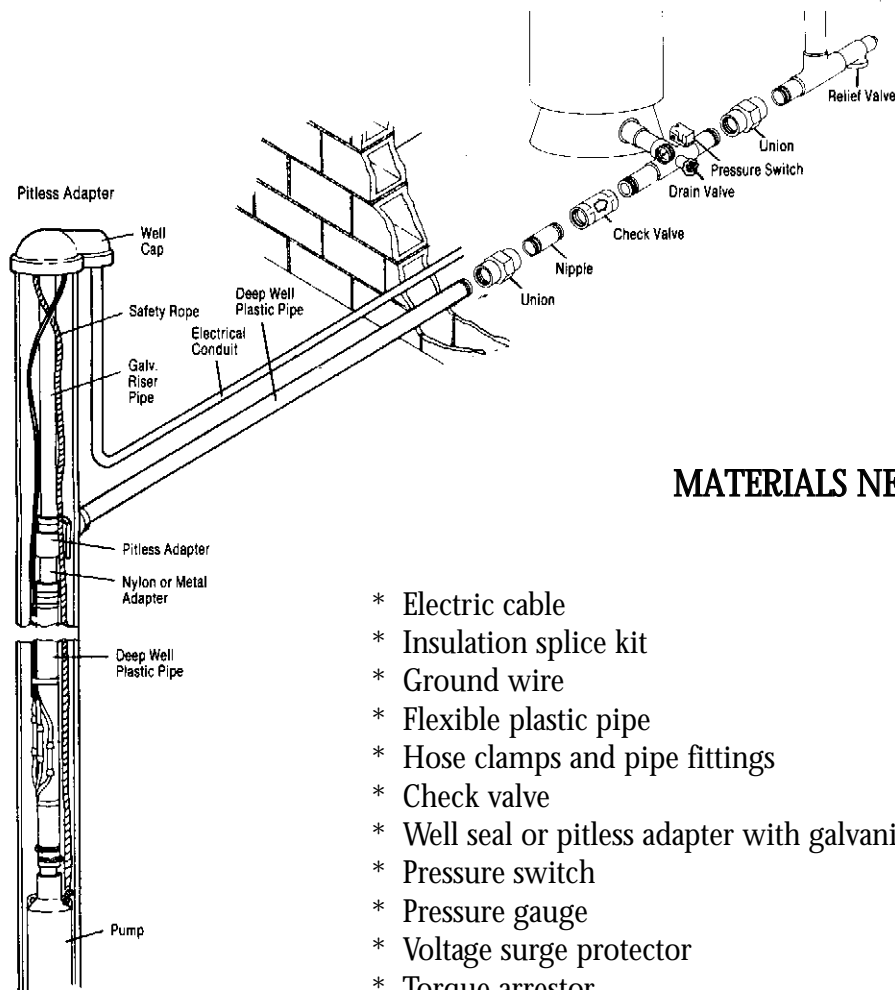
AVERAGE AMOUNT OF WATER REQUIRED BY VARIOUS HOME AND YARD FIXTURES

Drinking fountain, continuously flowing	50 to 100 gal. per day
Each shower bath	Up to 30 gal. @ 3-5 GPM
To fill bathtub	30 gal.
To flush toilet	6 gal.
To fill lavatory	2 gal.
To sprinkle 1/4" of water on each 1000 square feet of lawn	160 gal.
Dish Washing Machine — per load	7 gal. @ 4 GPM
Automatic washer — per load	Up to 50 gal. @ 4-6 GPM
Regeneration of Domestic Water Softener	50-100 gal.

AVERAGE FLOW RATE REQUIREMENTS BY VARIOUS FIXTURES

	(g.p.m. equals gal. per minute; g.p.h. equals gal. per hour)
Shower	3-5 g.p.m.
Bathtub	3-5 g.p.m.
Toilet	3 g.p.m.
Lavatory	3 g.p.m.
Kitchen sink	2 to 3 g.p.m.
1/2" hose and nozzle	200 g.p.h.
3/4" hose and nozzle	300 g.p.h.
Lawn sprinkler	120 g.p.h.

BASIC SUBMERSIBLE PUMP INSTALLATION



MATERIALS NEEDED

- * Electric cable
- * Insulation splice kit
- * Ground wire
- * Flexible plastic pipe
- * Hose clamps and pipe fittings
- * Check valve
- * Well seal or pitless adapter with galvanized riser pipe
- * Pressure switch
- * Pressure gauge
- * Voltage surge protector
- * Torque arrestor
- * Control box required on all 3-wire models

**CONTACT US FOR A
COMPLETE CATALOG ON
GRUNDFOS, REDJACKET OR
JACUZZI!**

GRUNDFOS PUMP SELECTION GUIDE

STANDARD SETTINGS

MODEL	MIN. WELL SIZE	FLOW RANGE (GPM)	MAX WORKING HEAD (FEET)	MAX. WORKING HEAD (PSI)
5S	4"	1.2-7	870	377
7S	4"	3-10	680	2794
10S	4"	5-14	950	411
16S	4"	10-20	990	429
25S	4"	18-32	630	273
40S	4"	24-55	755	327
60S	4"	40-75	505	219
75S	4"	45-95	460	199



FEATURES

Smooth safety hook prevents frayed safety line.

Built-in, jam free checkvalve designed for failsafe operation.

Snapguard cable guard is designed for installation and removal. Hold tight and provides maximum protection to motor leads.

Precision Form impellers are fabricated from stainless steel to provide long

pump life, maximum hydraulic efficiency and top pump performance.

Exclusive prime inducer provides maximum pump protection from dry-run damage during low water situations.

Pump inlet is totally screen to prevent damage from debris.

All Grundfos submersibles are performance tested at the factory to verify specified performance.

DEEP SETTINGS

MODEL	MIN. WELL SIZE	FLOW RANGE (GPM)	MAX. WORKING HEAD (FEET)	MAX. WORKING HEAD (PSI)
5S-DS	4"	1.2-7	1330	576
10S-DS	4" & 5"	5-14	1550	671
16S-DS	6"	10-20	1980	857
25S-DS	6"	18-32	1255	543
40S-DS	6"	24-55	1655	716
80S-DS	6" & 8"	48-110	1745	755
135S-DS	6" & 8"	75-200	1910	827
225S-DS	8"	150-290	1220	528
375S-DS	8"	230-500	1080	467
600S-DS	10"	350-500	590	255
1000S-DS	10"	600-1300	860	372



GRUNDFOS SUBMERSIBLE PUMPING SYSTEMS 4-INCH AND LARGER WELLS

				2-WIRE		3-WIRE						2-WIRE		3-WIRE	
TYPE	HP	PH	VOLT	FIG. NO.	PRICE	FIG. NO.	PRICE	TYPE	HP	PH	VOLT	FIG. NO.	PRICE	FIG. NO.	PRICE
5 GPM								7 GPM							
5S03-9	1/3	1	115	39346		39380		7S03-8	1/3	1	115	39354		39392	
5S03-9			230	39347		39381		7S03-8			230	39355		39393	
5S05-13	1/2	1	115	39348		39382		7S05-11	1/2	1	115	39356		39394	
5S05-13			230	39349		39383		7S05-11			230	39357		39395	
5S07-18	3/4	1	230	39350		39384		7S07-15	3/4	1	230	39358		39396	
5S10-22	1	1	230	39351		39385		7S10-19	1	1	230	39359		39397	
5S15-26	1 1/2	1	230	39352		39386		7S15-26	1 1/2	1	230	39360		39398	
5S15-26		3	230			39387		7S15-26		3	230			39399	
5S15-26		3	460			39388		7S15-26		3	460			39400	
5S15-31	1 1/2	1	230	39353		39389		16 GPM							
5S15-31		3	230			39390		16S05-5	1/2	1	115	39368		39416	
5S15-31		3	460			39391		16S05-5			230	39369		39417	
10 GPM								16S07-8	3/4	1	230	39370		39418	
10S03-6	1/3	1	115	39361		39401		16S10-10	1	1	230	39371		39419	
10S03-6			230	39362		39402		16S15-14	1 1/2	1	230	39372		39420	
10S05-9	1/2	1	115	39363		39403		16S15-14		3	230			39421	
10S05-9			230	49834		49223		16S15-14		3	460			39422	
10S07-12	3/4	1	230	39365		39405		16S20-18	2	1	230			39423	
10S10-15	1	1	230	39366		39406		16S20-18		3	230			39424	
10S15-21	1 1/2	1	230	39367		39407		16S20-18		3	460			39425	
10S15-21		3	230			39408		16S30-24	3	1	230			39426	
10S15-21		3	460			39409		16S30-24		3	230			39427	
10S20-27	2	1	230			39410		16S30-24		3	460			39428	
10S20-27		3	230			39411		16S50-38	5	1	230			39429	
10S20-27		3	460			39412		16S50-38		3	230			39430	
10S30-34	3	1	230			39413		16S50-38		3	460			39431	
10S30-34		3	230			39414		40 GPM							
10S30-34		3	460			39415		40S10-3	1	1	230	27143		27144	
25 GPM								40S15-5	1 1/2	1	230	27145		27146	
25S05-3	1/2	1	115	39373		39432		40S15-5		3	230			27147	
25S05-3			230	39374		39433		40S15-5		3	460			27148	
25S07-5	3/4	1	230	39375		39434		40S20-7	2	1	230			27149	
25S10-7	1	1	230	39376		39436		40S20-7		3	230			27150	
25S15-9	1 1/2	1	230	39377		39436		40S20-7		3	460			27151	
25S15-9		3	230			39437		40S30-9	3	1	230			27153	
25S15-9		3	460			39438		40S30-9		3	230			27154	
25S20-11	2	1	230			39439		40S30-9		3	460			27155	
25S20-11		3	230			39440		40S50-12	5	1	230			27156	
25S20-11		3	460			39441		40S50-12		3	230			27157	
25S30-15	3	1	230			39442		40S50-12		3	460			27158	
25S30-15		3	230			39443		40S50-15	5	1	230			27159	
25S30-15		3	460			39444		40S50-15		3	230			27160	
25S50-26	5	1	230			39445		40S50-15		3	460			27161	
25S50-26		3	230			39446		40S75-21	7 1/2	3	230			27162	
25S50-26		3	460			39447		40S75-21		3	460			27163	
								40275-25	7 1/2	3	230			27164	
								40275-25		3	460			27165	
								40S100-30	10	3	460			27167	

GRUNDFOS SUBMERSIBLE PUMPING SYSTEMS 4-INCH AND LARGER WELLS,

				2-WIRE		3-WIRE						2-WIRE		3-WIRE	
TYPE	HP	PH	VOLT	FIG. NO.	PRICE	FIG. NO.	PRICE	TYPE	HP	PH	VOLT	FIG. NO.	PRICE	FIG. NO.	PRICE
60 GPM								75 GPM							
60S20-4	2	1	230			39470		75S20-3	2	1	230			39485	
60S20-4		3	230			39471		75S20-3		3	230			39486	
60S20-4		3	460			39472		75S20-3		3	460			39487	
60S30-5	3	1	230			39473		75S30-5	3	1	230			39488	
60S30-5		3	230			39474		75S30-5		3	230			39489	
60S30-5		3	460			39475		75S30-5		3	460			39490	
60S50-7	5	1	230			39476		75S50-8	5	1	230			39491	
60S50-7		3	230			39477		75S50-8		3	230			39492	
60S50-7		3	460			39478		75S50-8		3	460			39493	
60S50-9	5	1	230			39479		75S75-12	7 1/2	3	230			39494	
60S50-9		3	230			39480		75S75-12		3	460			39495	
60S50-9		3	460			39481		75S100-16	10	3	460			39496	
60S75-13	7 1/2	3	230			39482									
60S75-13		3	460			39483									
60S100-18	10	3	460			39484									

Redi-Flo...the industry's choice for environmental applications



*Environmental Engineers Specify the Pump they've
Relied on for Years...GRUNDFOS*

*Typical Applications Include Well Purging
and Water Table Depression*

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3" JET SUB

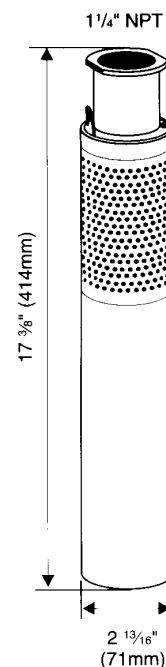
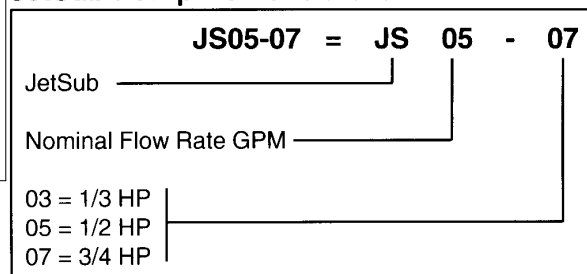
FIG. NO.	MDL	MTR HP	SF	AMPS	PRICE
47837	JS05-03	1/3	1.75	7	
47839	JS05-05	1/2	1.6	9	
47840	JS05-07	3/4	1.5	11	
47841	JS07-03	1/3	1.75	7	
47842	JS07-05	1/2	1.6	9	
47843	JS07-07	3/4	1.5	11	
47844	JS10-03	1/3	1.75	7	
47845	JS10-05	1/2	1.6	9	
47846	JS10-07	3/4	1.5	11	
47847	JS16-05	1/2	1.6	9	
47848	JS16-07	3/4	1.5	11	

* Measurement taken with RMS instrument

Weights and Dimensions

MODEL	LENGTH	WIDTH	APPROX. SHIP WT.
ALL	17 3/8"	2 13/16"	11 lbs.

JetSub Pump Nomenclature



**CALL
DUFF FIRST
FOR
ALL
YOUR
PUMP
NEEDS**

610-275-4453

3" SUBMERSIBLE PUMP

Submersible Pumps vs. Jet Pumps

Submersible and jet pumps are both used in domestic groundwater systems. When high flow rates and pressure settings are required at high operating efficiencies, submersible pumps are generally preferred. Submersible pumps have the advantage of performing well both in shallow well applications as well as at depths to 2,000 feet. An extensive range of submersible pump models is also available allowing a precise match to exact system requirements.

Convertible jet pumps are sometimes an economical alternative to submersibles, especially in shallow well installations of 25 feet or less. The pumps are less expensive, installation is simplified, and they are easily converted for deep well installations down to 100 feet (Figure 8-H).

In "weak" well applications where the pump lowers the water level in the well faster than the well can replenish itself, a deep well jet pump with a tail pipe is particularly effective when flow requirements are relatively small. By adding 35 feet of tail pipe below the jet assembly with the foot valve attached to the bottom, it will not be possible to pull the well down and allow air to enter the system. Pump delivery remains at 100% of the rated capacity down to the level of the jet assembly. If the water level falls below that point, flow decreases in proportion to the drawdown as shown in Figure 8-I. When pump delivery equals well inflow, the water level remains constant until the pump shuts off. At 33.9 feet of drawdown the pump will no longer deliver water but the foot valve will remain fully submerged.

GRUNDFOS JETSUB SELECTION CHART

JetSub Selection Charts (Ratings are in GALLONS PER HOUR—GPH)

SELECTION CHARTS

(Ratings are in GALLONS PER HOUR—GPH)

PUMP OUTLET

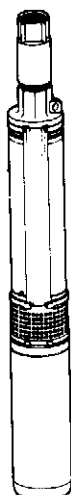
1 1/4"

DEPTH TO PUMPING WATER LEVEL (LIFT) IN FEET													
PUMP MODEL	PSI	20	40	60	80	100	120	140	160	180	200	220	240
JS05-03	30	480	432	384	330	284	198	120					
	40	480	372	312	246	168	90						
	50	354	300	240	156	90							
	60	282	22	156	90								
PUMP MODEL	PSI	20	40	60	80	100	120	140	160	180	200	220	240
JS05-05	30		480	438	396	360	324	276	234	198	156	102	
	40	474	420	384	342	288	258	222	180	138	96	66	
	50	408	384	324	288	258	210	174	138	96	54		
	60	384	336	288	258	210	174	156	96	48			
PUMP MODEL	PSI	20	40	60	80	100	120	140	160	180	200	220	240
JS05-07	30						456	402	372	336	300	276	234
	40					432	396	354	324	282	252	228	204
	50			480	432	390	354	324	282	252	222	210	174
	60		474	426	384	366	324	282	252	222	204	168	150
PUMP MODEL	PSI	20	40	60	80	100	120	140	160	180	200	220	240
JS07-03	30			438	354	240							
	40		420	324	198								
	50		300	180									
	60	300	168										
PUMP MODEL	PSI	20	40	60	80	100	120	140	160	180	200	220	240
JS07-05	30				456	432	378	336	282	222	144		
	40			450	408	372	330	270	210	102			
	50		438	402	372	312	258	210	102				
	60	444	408	372	312	258	210						
PUMP MODEL	PSI	20	40	60	80	100	120	140	160	180	200	220	240
JS07-07	30							462	438	402	378	342	306
	40						462	438	396	366	330	306	258
	50					456	432	396	360	324	282	252	210
	60				450	432	396	366	330	282	252	210	156
PUMP MODEL	PSI	20	40	60	80	100	120	140	160	180	200	220	240
JS10-03	30	678	582	438									
	40	558	420										
	50	360											
	60												
PUMP MODEL	PSI	20	40	60	80	100	120	140	160	180	200	220	240
JS10-05	30			666	606	540	414	336					
	40	714	660	588	516	420	306						
	50	648	582	516	414	276							
	60	582	510	414	276								
PUMP MODEL	PSI	20	40	60	80	100	120	140	160	180	200	220	240
JS10-07	30					720	642	594	534	462	414	312	
	40				696	642	570	522	456	396	306	210	
	50			690	636	582	516	450	360	288	186		
	60		684	624	576	522	438	366	294	180			
PUMP MODEL	PSI	20	40	60	80	100	120	140	160	180	200	220	240
JS16-05	30	1056	936	780	648	450							
	40	894	768	606	372								
	50	726	546	342									
	60	546	318										
PUMP MODEL	PSI	20	40	60	80	100	120	140	160	180	200	220	240
JS16-07	30	1158	1086	1014	912	810	714	588	456	300			
	40	1074	990	900	804	672	558	420	252				
	50	966	858	792	660	540	384	210					
	60	858	768	648	534	378							

JACUZZI SUBMERSIBLE PUMPS



Thermoplastic



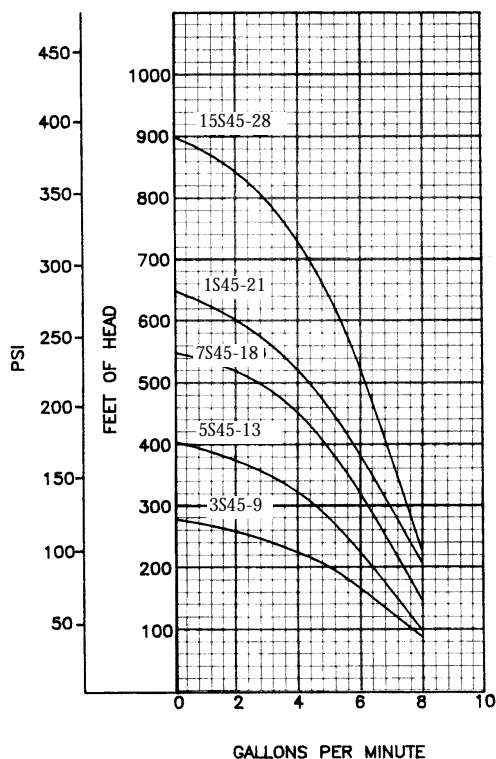
Bronze

SandHandler™ 4" Submersible Pumps

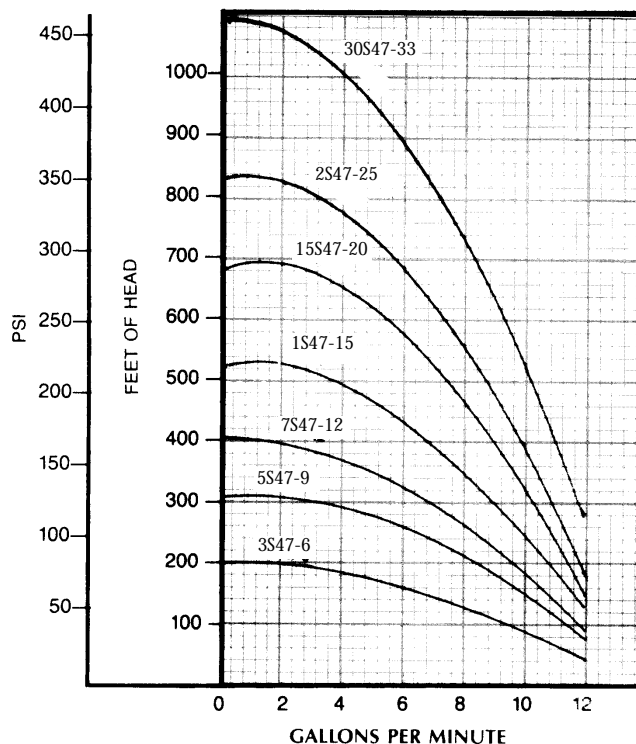
- Available in bronze and stainless steel or thermoplastic and stainless steel.
- Ceramic shaft sleeve and rubber discharge bearing reduces sand wear.
- Thermoplastic impellers and stages for maximum efficiency.
- Bronze model includes separate external check valve.
- Thermoplastic model includes built-in check valve.
- Available in 5 to 25 gpm models.

JACUZZI®

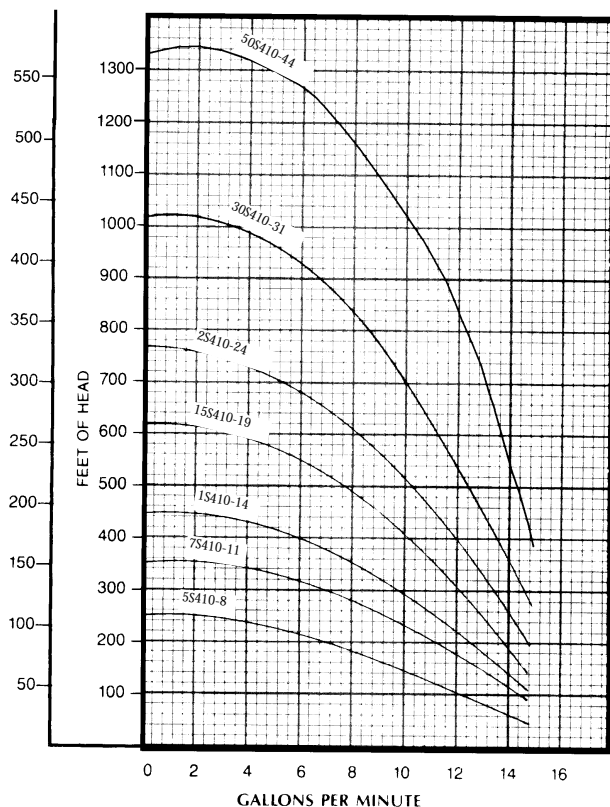
JACUZZI SANDHANDLER 5 GPM



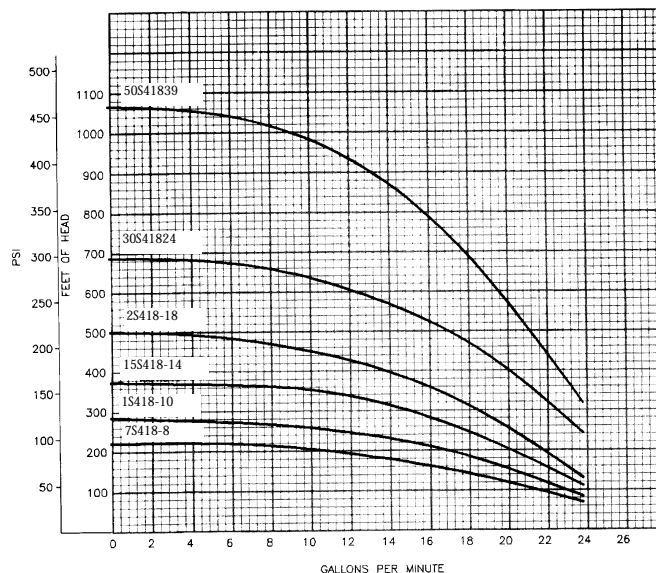
JACUZZI SANDHANDLER 7 GPM



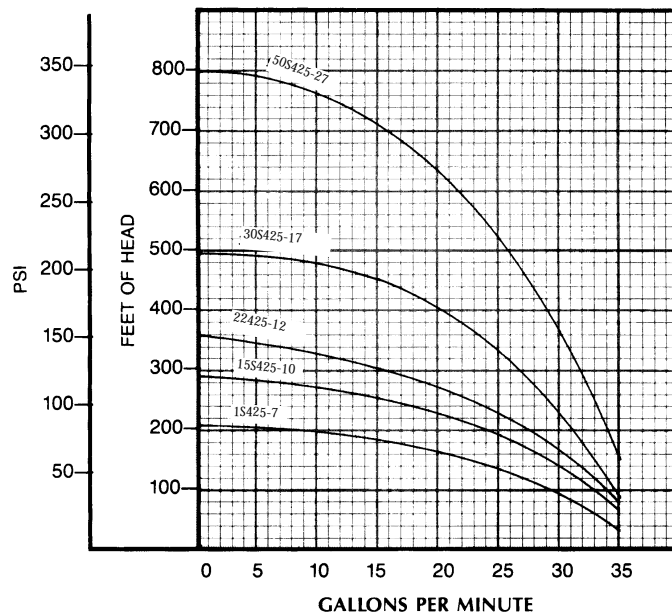
JACUZZI SANDHANDLER 10 GPM



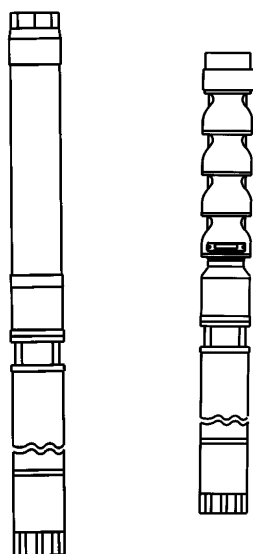
JACUZZI SANDHANDLER 18 GPM



JACUZZI SANDHANDLER 25 GPM



HIGH CAPACITY PUMPS



4" FEATURES

- *Cast iron discharge head and motor bracket
- *3 performance ranges - 45, 60 & 90 GPM
- *High flow impellers and stages are glass filled noryl for maximum efficiency
- *Ceramic shaft sleeve and rubber discharge bearing reduces sand wear
- *Floating eye and hub seals for improved performance and efficiency.
- *Stainless steel hex pump shaft, shell and shaft coupling.
- *High capacity upthrust assembly for protection during start-up and operation
- *Powered by Franklin's corrosion resistant 4" submersible motors 2" discharge

For additional information call: 610-275-4453 or Fax: 610-279-6299
Please call for current prices.

6" FEATURES

Designed for farm, irrigation, industry, municipal and commercial use. The 6" submersible turbine is available in 6 different performances from 90 GPM to 500 GPM ranging from 7 1/2 to 60 HP.

HURRICANE™

SUBMERSIBLE PUMP BY JACUZZI



If you are a home owner needing a submersible pump, there are several things you expect:

- Performance that delivers the water you want at the pressure you need.
- A quality, non-corrosive, durable product.
- Environmentally conscious, lead-free construction.
- Economical pricing.

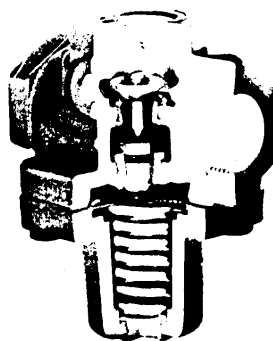
With the Jacuzzi Hurricane submersible pump that's what you get!



POWERED BY
Franklin Electric

The **HURRICANE™** Submersible Pump by **JACUZZI**

HYDROSERVANT I REGULATING VALVES



Nothing burns out a pump motor quicker than heat from frequent starts and stops. Momentary power required to start a motor generates high heat that can build up and cause deterioration of motor windings.

Red Jacket's HydroServant I regulating valves eliminates this rapid-cycling condition. It allows the pump to run under water demand conditions as slow as a half gallon per minute. The HydroServant I creates a delay between starts, even when faucets are quickly opened and closed. That's the reason behind its popularity as it minimizes starting and stopping of the pump, to assure even water pressure. HydroServant I assures far less cycling during a typical day than other regulating devices, but will allow the pump to run as long as there is a demand for water. The pump cuts off when pressure reaches a predetermined level, keeping constant pressure in the system when there is no water demand.

FOR CAPACITIES UP TO 20 GPM

Provides constant water pressure
Ends pressure variations
Eliminates rapid-cycling
Compact, space saving design
Economical tank package alternative

ALSO IDEAL FOR THE FOLLOWING APPLICATIONS

Booster pump on low demand and volume water systems
Restricted storage areas such as trailer or mobile home water systems
Condominium water systems
Summer resort homes

FIG. NO.	PRICE
10945	

For additional information call: 610-275-4453 or Fax: 610-279-6299
Please call for current prices.

HYDROSERVANT II REGULATING VALVES

FOR CAPACITIES FROM 30 TO 300 GPM

Regulates pressure in larger capacity systems
Maintains constant pressure output
Cost less than pressure tank systems of equivalent size or larger
Eliminates rapid-cycling

ALSO IDEAL FOR THE FOLLOWING APPLICATIONS

Sprinkler irrigation installations
Small community water systems
Industrial/Commercial plant water systems
Cooling tower installations

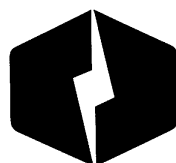


The HydroServant II features a pressurized air chamber with a sensitive pressure switch which activates the pump to maintain both pressure and volume. The pump operates as long as there is a demand on the system, even at levels as low as 30 GPM, and shuts off only when demand is withdrawn. The HydroServant II drastically reduces rapid-cycling, which is a major cause of motor winding burn-out.

Conventional hydro-pneumatic tank systems in high-capacity applications can be replaced by a HydroServant II installation.



FIG. NO.	PRICE
61440	



REDJACKET®

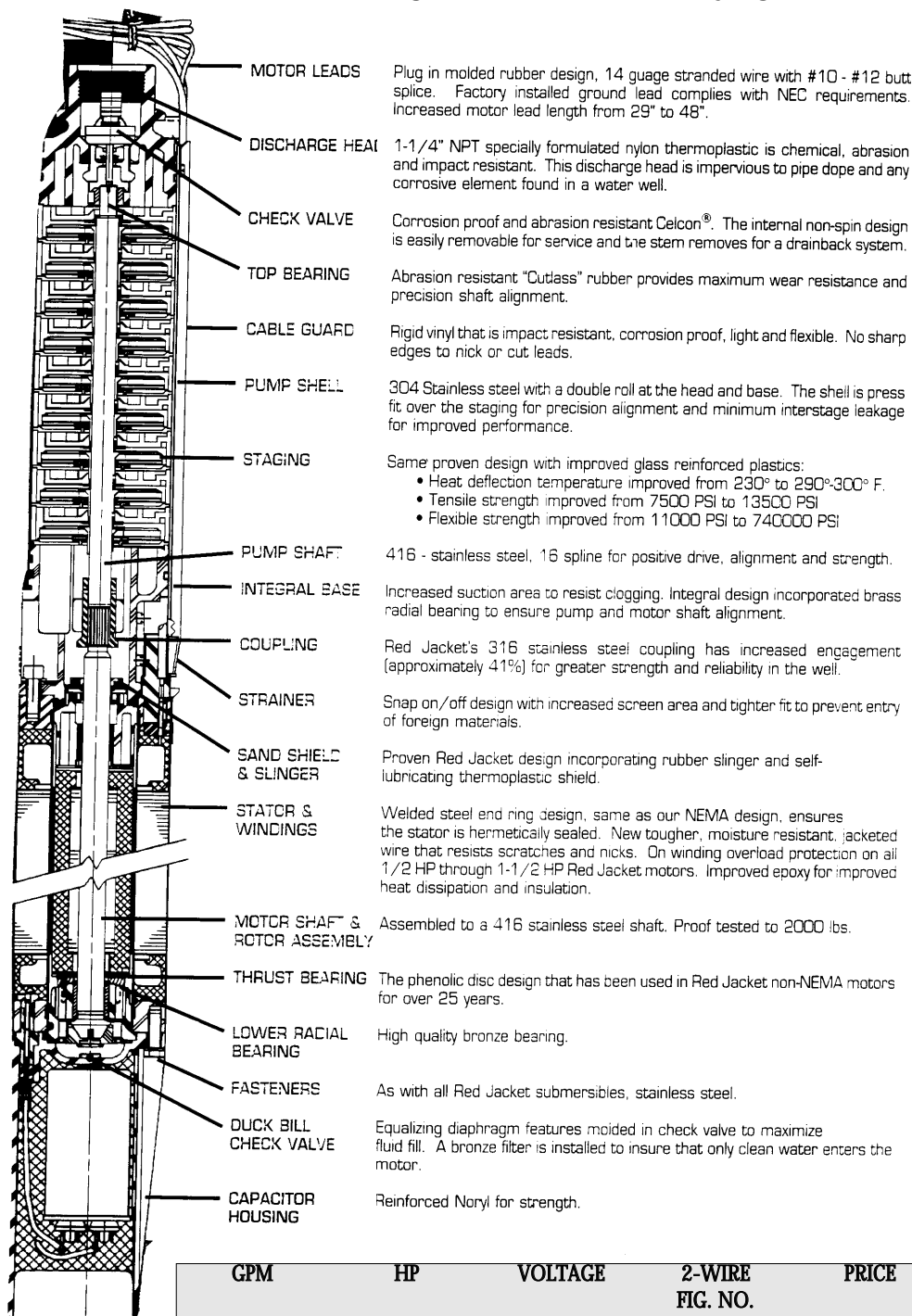
GRIZZLY BY RED JACKET

The Red Jacket 2-wire and 3-wire GRIZZLY is the most advanced pump on the market today. At Red Jacket, we believe the best way to build top quality products is to manufacture them ourselves. Red Jacket is one of the few remaining American companies that designs and manufactures its own motors. This ability allows us to perfectly match our pumps and motors to give maximum performance.

Our 208/230 volt motor is the only standard dual rated motor in the industry. When voltage supplies are not a consistent 230 volts, as in some rural applications, our motor will continue to operate efficiently, unlike the motors of our competitors.

The continuous duty capacitor on our 2-wire motors provides quiet operation and lower operating costs.

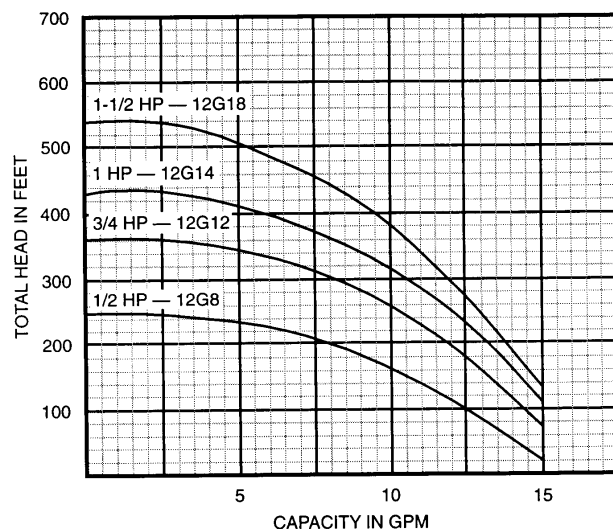
All Red Jacket submersible pumps are American made at our modern manufacturing facility in Davenport, Iowa.



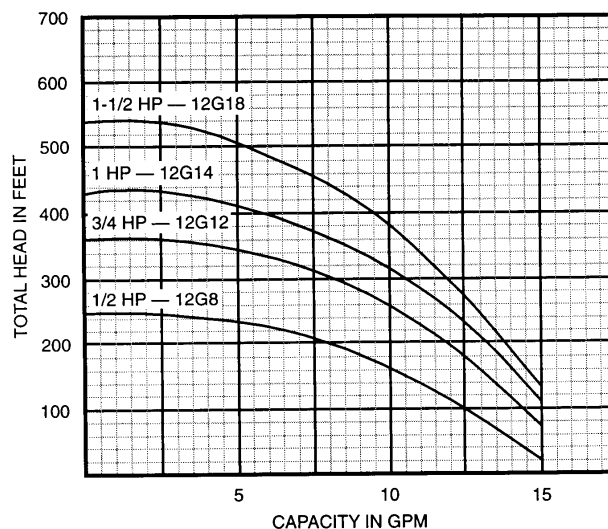
GPM	HP	VOLTAGE	2-WIRE FIG. NO.	PRICE	3-WIRE FIG. NO.	PRICE
6 GPM	1/2	230	73018		73039	
6 GPM	3/4	230	73019		73040	
6 GPM	1	230	73020		73035	
8 GPM	1/2	230	73022		73042	
8 GPM	3/4	230	73023		73043	
8 GPM	1	230	73024		73044	
12 GPM	1/2	115	73026		73046	
12 GPM	1/2	230	73027		73048	
12 GPM	3/4	230	73028		73049	
12 GPM	1	230	73029		73050	
20 GPM	1	230	72023		73056	
20 GPM	1 1/2	230	72024		73058	
25 GPM	1	230	73036		73059	
25 GPM	1 1/2	230	73037		73060	

RED JACKET GRIZZLY SUBMERSIBLE PUMPS

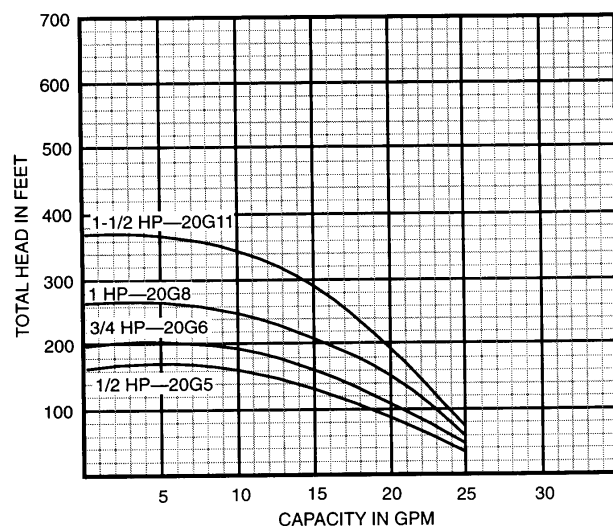
Performance Curves — 12G Series



Performance Curves — 12G Series

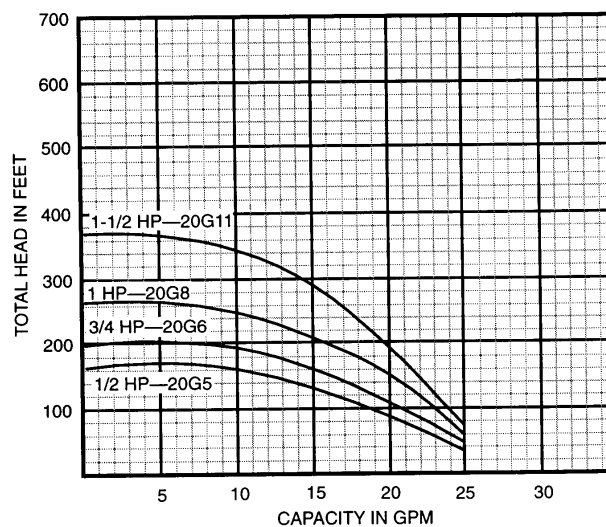


Performance Curves — 20G Series



RJW-124— Page 2

Performance Curves — 20G Series

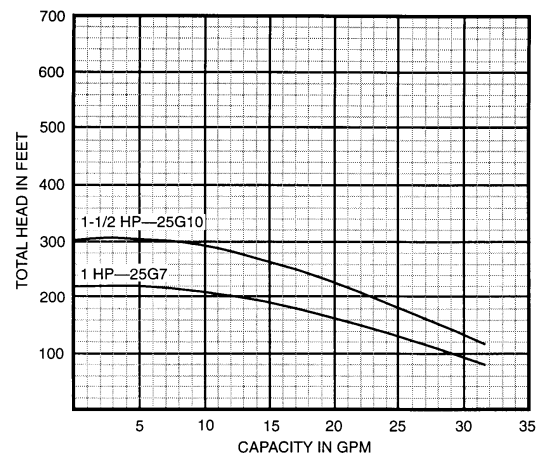


RJW-124— Page 2

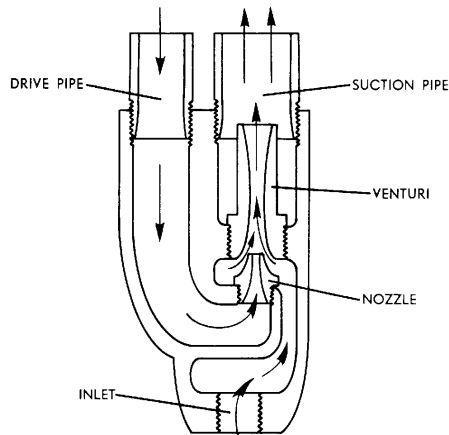
RED JACKET CONTROL BOXES

HP	VOLTAGE	FIG. NO.	PRICE
1/2	115	9906	
1/2	230	9902	
3/4	230	9911	
1	230	9916	
1 1/2	230	9916	
2	230	9947	
3	230	9953	
5	230	9961	

Performance Curves — 25G Series



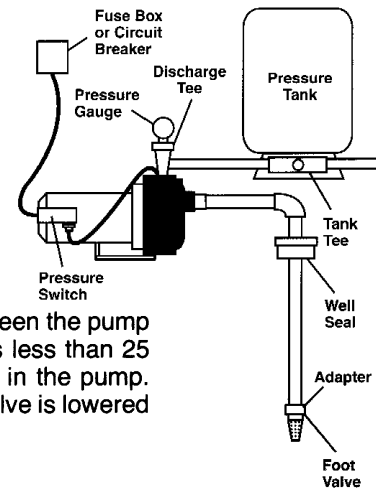
HOW A JET PUMP WORKS



A jet pump pumps water with water. In deep well jet pumps a small amount of the water delivered by the pump is returned through the pressure pipe to the nozzle of the injector. The nozzle converts this high pressure to velocity. In the Venturi, this velocity is reduced and a partial vacuum is created, causing water in the well to enter the injector. This additional water is carried along with the water circulated by the pump—moved up the suction pipe to the impeller. This extra water picked up by the jet in the well is discharged by the pump with a portion of it recirculating through the injector to enable the jet to function. In the shallow well jet, the operation of the injector is the same except that the injector is located at the entrance to the impeller rather than down the well. In a shallow well jet pump, passages in the pump case casting serve the functions of the pressure and suction pipes used with deep well jet pumps.

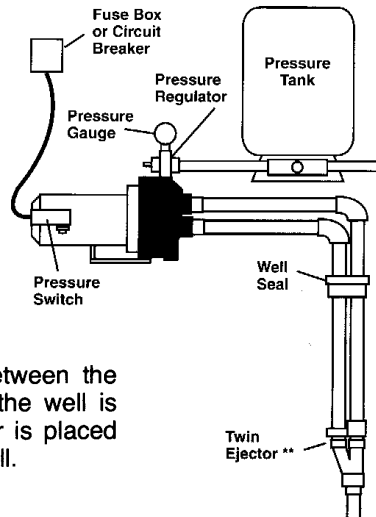
SHALLOW WELL

Where the vertical distance between the pump and the water level in the well is less than 25 feet, the injector is incorporated in the pump. Only a suction pipe with a foot valve is lowered into the well.



DEEP WELL

When the vertical distance between the pump and the water level in the well is more than 25 feet, the injector is placed below the water level in the well.



GRUNDFOS®

Leaders in Pump Technology

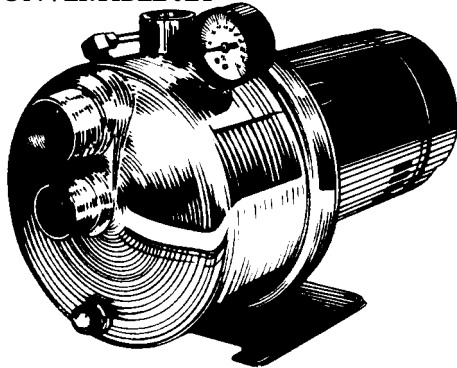
JACUZZI®

REDJACKET®

**CALL DUFF
FIRST
FOR ALL
YOUR PUMP
NEEDS!**

GRUNDFOS JET PUMPS

CONVERTIBLE JET



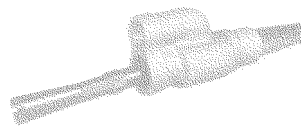
Materials of Construction

DESCRIPTION	MATERIAL
Motor Stool	E-Coated Aluminum
Shaft Seal	Carbon/Ceramic/EPDM
O-Rings & Gaskets	EPDM
Base Plate	AISI 304 SS
Pump Housing (Cap)	AISI 304 SS
Impeller	AISI 304/316 SS
Tubing	Polyethylene
Seal Plate	AISI 304 SS
Ejector/Guide Vane	AISI 304 SS/EPDM/Noryl®

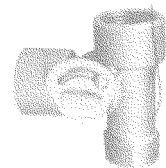
NOTES: EPDM - Ethylene Propylene Rubber
Noryl® is a registered trademark of General Electric Company

PUMP TYPE	HP	MOTOR S.F.	PH	VOLTS	NEMA FRAME SIZE	DISC SIZE NPT	SUC SIZE NPT	FIG. NO.	PRICE
JP5	1/2	1.6	1	115/230	56J	1"	1 1/4"	38799	
JP7	3/4	1.5	1	115/230	56J	1"	1 1/4"	38800	
JP10	1	1.4	1	115/230	56J	1"	1 1/4"	41841	

PARALLEL PIPE EJECTOR/FOOT VALVE



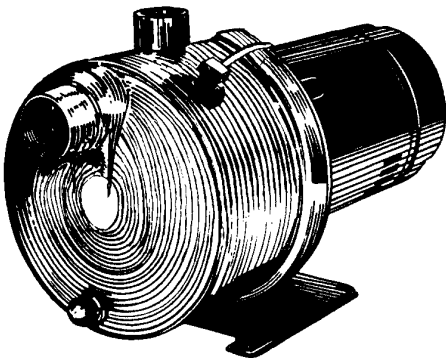
CONTROL VALVE



EJECTOR	FOR USE WITH	HP	NOM. DEPTH	MIN WEL DIA	PRESSURE CONNECT	SUCTION CONNECT	FIG. NO.	PRICE
5050	JS-5	1/2	50'	4"	1"	1 1/4"	40691	
5100	JS-5	1/2	100'	4"	1"	1 1/4"	40692	
7050	JS-7	3/4	50'	4"	1"	1 1/4"	40693	
7100	JS-7	3/4	100'	4"	1"	1 1/4"	40694	
10050	JS-10	1	50'	4"	1"	1 1/4"	44368	
10100	JS-10	1	100'	4"	1"	1 1/4"	44369	

SIZE	FIG. NO.	PRICE
1"	40695	

SHALLOW WELL JET PUMPS



Materials of Construction

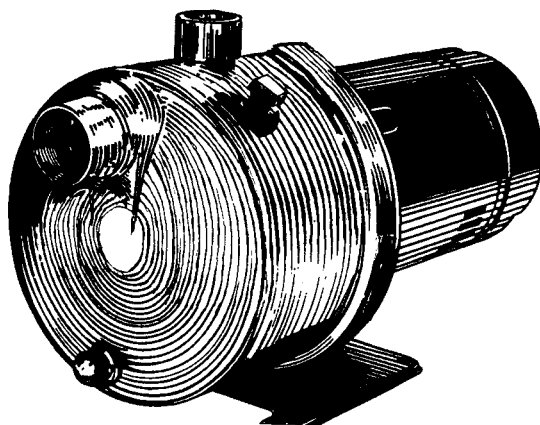
DESCRIPTION	MATERIAL
Motor Stool	E-Coated Aluminum
Shaft Seal	Carbon/Ceramic/EPDM
O-Rings & Gaskets	EPDM
Base Plate	AISI 304 SS
Pump Housing (Cap)	AISI 304 SS
Impeller	AISI 304/316 SS
Tubing	Polyethylene
Seal Plate	AISI 304 SS
Ejector/Guide Vane	AISI 304 SS/EPDM/Noryl®

NOTES: EPDM - Ethylene Propylene Rubber
Noryl® is a registered trademark of General Electric Company

PUMP TYPE	HP	MOTOR S.F.	PH	VOLTS	NEMA FRAME SIZE	DISC SIZE NPT	SUC SIZE NPT	FIG. NO.	PRICE
JP-5	1/2	1.6	1	115/230	56J	1"	1 1/4"	53593	
JP-7	3/4	1.5	1	115/230	56J	1"	1 1/4"	53594	
JP-10	1	1.4	1	115/230	56J	1"	1 1/4"	53595	

For additional information call: 610-275-4453 or Fax: 610-279-6299
Please call for current prices.

GRUNDFOS JET STAR BOOSTER PUMP



Technical Data

FLOW RANGE: 1 - 40 GPM

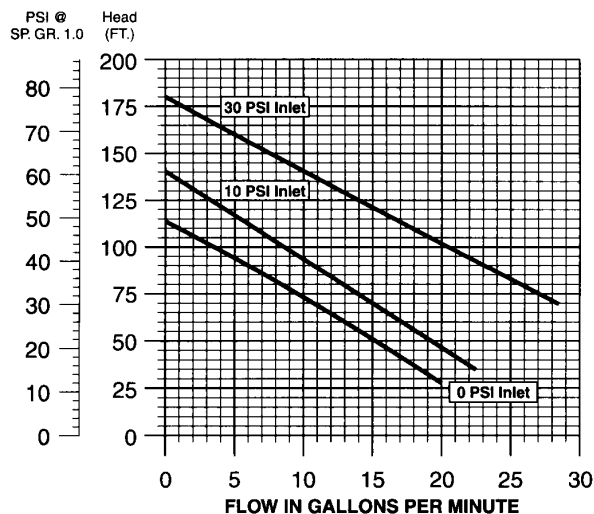
MOTORS: ODP (Open Drip Proof)

MAX. FLUID TEMPERATURE: 95°F

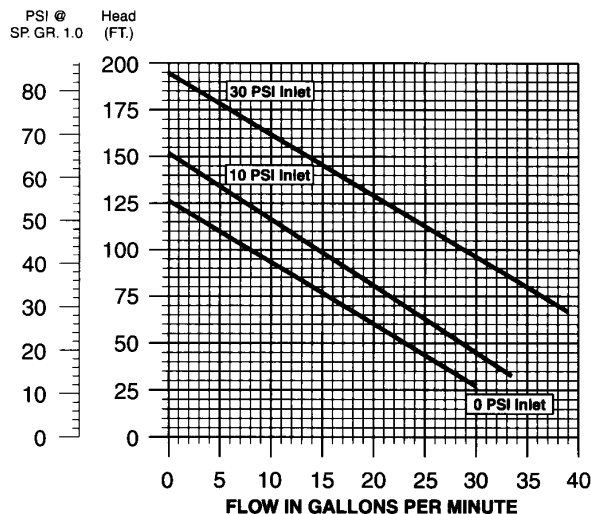
MAX. WORKING PRESSURE: 85 psig

Performance Curves

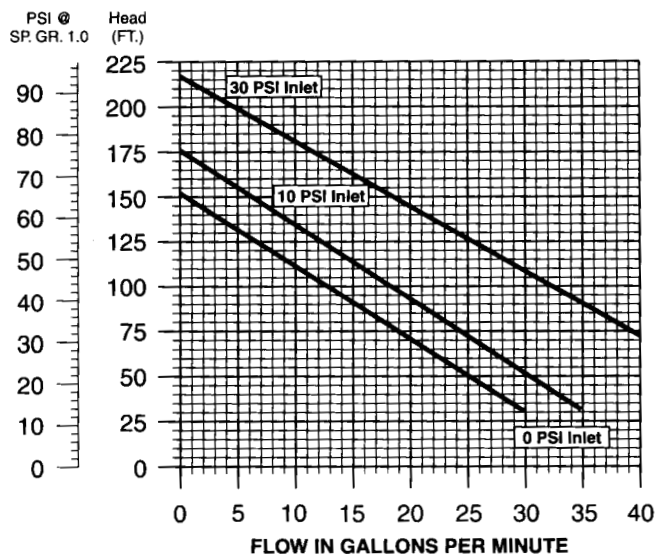
JB50 1/2 HP



JB70 3/4 HP



JB100 1 HP



GRUNDFOS JETPAQ A COMPLETE PUMP SYSTEM



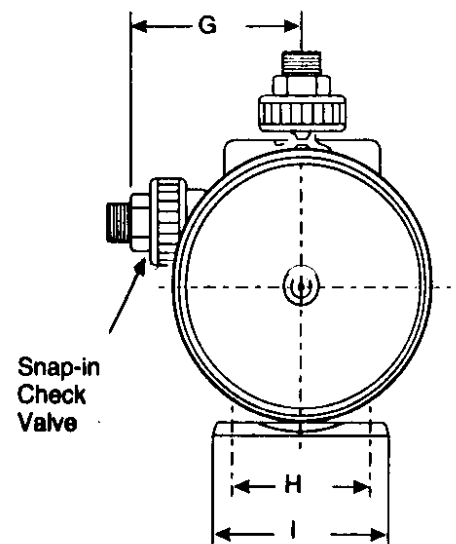
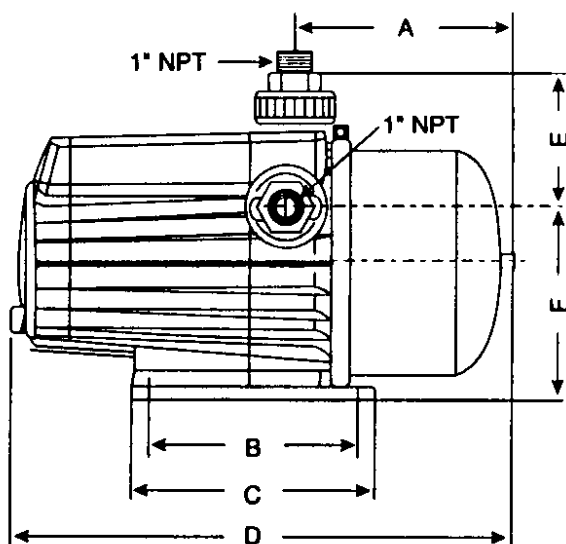
SUBMITTAL DATA

50/60 HERTZ

The JetPak is a complete pumping system with pump, tank, and pressure switch integrated into one compact unit. The pump uses a Micro Frequency Converter to continually adjust speed to meet your pre-set pressure setting

ELECTRICAL DATA AND DIMENSIONS

FIG. NO.	Model	AMP	PH	Volts	A	B	C	D	E	F	G	H	I	PRICE
58560	JQ2	9.0	1	115	7.8	7.5	8.8	18	4.7	6.6	5.6	4.5	5.7	
58561	JQ2	5.5	1	230	7.8	7.5	8.8	18	4.7	6.6	5.6	4.5	5.7	
58562	JQ4	13.0	1	115	7.8	7.5	8.8	18	4.7	6.6	5.6	4.5	5.7	
58563	JQ4	8.0	1	230	7.8	7.5	8.8	18	4.7	6.6	5.6	4.5	5.7	

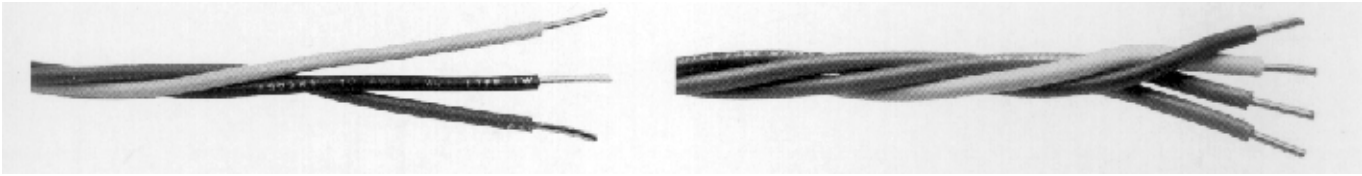


***DO AWAY WITH YOUR STORAGE TANK**
***TO REPRESSURIZE YOUR SYSTEM**
***OR FOR GENERAL BOOSTER APPLICATION**

USE THE JETPAQ!

SUBMERSIBLE PUMP CABLE

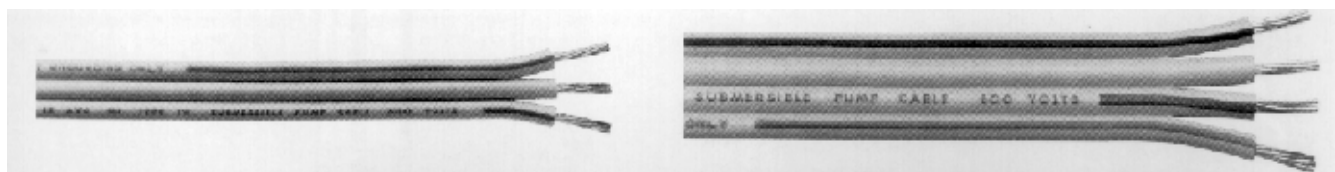
600 VOLT - TWISTED - PVC INSULATION - WITH GROUND



AWG SIZE	FIG. NO.	SHIP WT.	PRICE
12/2	49731	107	
12/3	49735	140	
10/2	49732	150	
10/3	49736	200	
8/2	49733	254	
8/3	49739	338	
6/3	49729	450	
4/3	n/a	627	

FOR LARGER SIZES, PLEASE CALL US!
610-275-4453

600 VOLT - FLAT PARALLEL - PVC INSULATION - WITH GROUND



AWG SIZE	FIG. NO.	SHIP WT.	PRICE
12/2	49741	113	
12/3	49742	132	

Application: For use within the well casing supplying current to the submersible pump. Maximum conductor operating temperatures of 60° C in circuits not exceeding 600 volts.

UNDERGROUND FEEDER CABLE TYPE UF-B WITH GROUND PVC CONDUCTORS, NYLON JACKET

APPLICATIONS

Kalas Type UF-B underground feeder and branch circuit cable is UL Listed and meets the requirements of UL83, UL493 and Federal specification JC-30B. It is suitable for installation and use as defined by Article 339 of the National Electrical code at voltages up to 600 volts at a conductors temperature of 60°F. It may be installed in exposed and concealed locations, in dry, moist damp or corrosive environments, in outside and inside walls of masonry and tile, and direct buried. It may also be exposed to the direct rays of the sun.



AWG SIZE	FIG. NO.	SHIP WT.	PRICE
12/2	53433	97	
12/3	53434	152	

TYPE RED WIRE NUTS

100 to a box. Red 18-10 AWG.



FIG. NO.	PRICE
44593	

STA-KON

STA-KON ONLY. Packed 10 to a box.

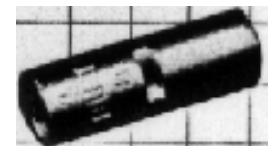


FIG. NO.	PRICE
20174	

ELECTRICAL TAPE

3/4" X 60"



FIG. NO.	PRICE
15332	

HEAT SHRINK SPLICE KIT.



SIZE	FIG. NO.	PRICE
2	10827	
3	10829	
4	47006	

For additional information call: 610-275-4453 or Fax: 610-279-6299
Please call for current prices.

WIRE SELECTION CHART FOR SUBMERSIBLE MOTORS

1. Select wire size for which maximum length equals or exceeds that required. Note that warranty is voided by use of smaller size or longer length than those recommended. Wire sizes comply with table 310-16, column 2 of National Electrical Code (1975 Edition). Allowable ampacity of insulated copper conductors (which covers type RHW, RUH and THWN conductors).

2. Voltage at service entrance will be rated voltage i.e. 225, 200, 230, 460, 575. (This is the 60 Hertz voltage assumed to be available at the service entrance.)

3. Voltage at the motor shall be at least 95% of service entrance voltage with the motor running under normal operating conditions.

4. Cable lengths are based on one continuous wire size run from the service entrance to the motor terminals rather than breaking down into different sizes for supply and drop cable. The portion of the total cable length which is between the service entrance and single phase motor control box should not exceed 25% of the total maximum allowable, to insure proper control of box operation.

2 & 3 Wire Single Phase Franklin Motors

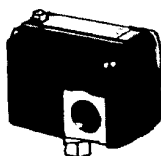
MOTOR		MAXIMUM FEET OF COPPER CABLE, SIZE										
Volts	HP	14	12	10	8	6	4	2	0	00	000	0000
115	1/3 1/2	130 100	210 160	340 250	540 390	840 620	1300 960	1960 1460	2910 2160			
230	1/3 1/2 3/4 1 1-1/2 2 3 5 7-1/2 10	550 400 300 250 190 150 120 0 0 0	880 650 480 400 310 250 190 110 0 0	1390 1020 760 630 480 390 300 180 120 0		1200 990 770 620 470 280 200 160 0 0	1540 1200 1870 1530 1190 710 490 390 0 0	2360 1530 1850 1110 750 600 930 1160 1430 1760	2890 1740 2890 1740 1140 930 1160 1430 1760 0			

Three Phase Franklin Motors

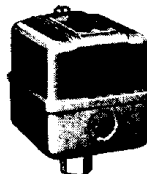
MOTOR		MAXIMUM FEET OF COPPER CABLE, SIZE										
Volts	HP	14	12	10	8	6	4	2	0	00	000	0000
200V 60Hz	1-1/2	310	500	790	1260	1960	3050					
	2	240	390	610	970	1520	2360	3610	5420			
	3	180	290	470	740	1160	1810	2760	4130			
	5	110	170	280	440	690	1080	1660	2490	3050	3670	4440
	7-1/2	0	0	200	310	490	770	1180	1770	2170	2600	3150
	10	0	0	150	230	370	570	880	1330	1640	1970	2390
	15	0	0	0	160	250	390	600	910	1110	1340	1630
	20	0	0	0	0	190	300	460	700	860	1050	1270
	25	0	0	0	0	0	240	370	570	700	840	1030
230V 60Hz and 220V 50Hz	1-1/2	420	670	1060	1670	2610	4050	6160	9170			
	2	320	510	810	1280	2010	3130	4770	7170	8780		
	3	240	390	620	990	1540	2400	3660	5470	6690	8020	9680
	5	140	230	370	590	920	1430	2190	3290	4030	4850	5870
	7-1/2	0	160	260	420	650	1020	1560	2340	2870	3440	4160
	10	0	0	190	310	490	760	1170	1760	2160	2610	3160
	15	0	0	0	210	330	520	800	1200	1470	1780	2150
	20	0	0	0	160	250	400	610	930	1140	1380	1680
	25	0	0	0	0	200	320	500	750	920	1120	1360
30	0	0	0	0	0	260	410	620	760	930	1130	
460V 60Hz and 380V- 460V 50Hz (Divide lengths by 1.4 for 380V 60Hz)	1-1/2	1700	2710	4270	6730							
	2	1300	2070	3270	5150							
	3	1000	1600	2520	3970	8050						
	5	590	950	1500	2360	3700	5750					
	7-1/2	420	680	1070	1690	2640	4100	6260				
	10	310	500	790	1250	1960	3050	4680	7050			
	15	0	340	540	850	1340	2090	3200	4810	5900	7110	
	20	0	0	410	650	1030	1610	2470	3730	4580	5530	
	25	0	0	330	530	830	1300	1990	3010	3700	4470	5430
	30	0	0	270	430	680	1070	1640	2490	3060	3700	4500
	40	0	0	0	320	500	790	1210	1830	2250	2710	3290
	50	0	0	0	0	410	640	980	1480	1810	2190	2650
	60	0	0	0	0	0	540	830	1250	1540	1850	2240
	75	0	0	0	0	0	440	680	1030	1260	1520	1850
	100	0	0	0	0	0	0	500	760	940	1130	1380
575V 60Hz	1-1/2	2620	4180	6580								
	2	2030	3250	5110	8060							
	3	1580	2530	3980	6270							
	5	920	1480	2330	3680	5750						
	7-1/2	660	1060	1680	2650	4150						
	10	490	780	1240	1950	3060	4770					
	15	330	530	850	1340	2090	3260					
	20	0	410	650	1030	1610	2520	3860	5830			
	25	0	0	520	830	1300	2030	3110	4710			
	30	0	0	430	680	1070	1670	2560	3880	4770	5780	7030
	40	0	0	0	500	790	1240	1900	2860	3510	4230	5140
	50	0	0	0	410	640	1000	1540	2310	2840	3420	4140
	60	0	0	0	0	540	850	1300	1960	2400	2890	3500
	75	0	0	0	0	0	690	1060	1600	1970	2380	2890
	100	0	0	0	0	0	0	790	1190	1460	1770	2150

PRESSURE SWITCHES AND CONTROL SYSTEMS**PRESSURE SWITCHES**

These electric control pressure switches are dependable and sure-acting for all water systems. Easy to install and easy to service, each switch has a removable cover that exposes the entire mechanism and the electrical leads. The contacts are of fine silver, double break type that permit a more efficient flow of current.

**FSG-2**

FSG-2	FIG. NO.	PRICE
20/40	8229	
30/50	8254	
30/50 G5	8267	
30/50 P	50216	
40/60	45486	
30/50 M4	8286	

**GSG-2 OR
GHG-2**

GHG-2	FIG. NO.	PRICE
80/100	25322	

GSG-2	FIG. NO.	PRICE
20/40	8307	
30/50	8317	
40/60	8327	
50/70	8347	
60/80	8361	

**ELECTRODES**

Fig. No.	Probes	Unit Wt	PRICE
27964	Stainless Steel	1 oz.	
10673	Brass	1 oz.	

FLOATLESS LIQUID LEVEL CONTROL SYSTEMS

Provides automatic low level cutoff protection for submersible pumps and deep well turbines. Liquid level submersible pump control system consists of a standard enclosed type LH induction relay which operates from two type E1-S insulated electrodes suspended at desired levels. Properly installed, these components provide reliable automatic low level cutoff protection for submersible pumps and deep well turbines. Permits efficient operation at full capacity and eliminated danger of pumping air or sand.

Type LH Relay - the LH relay is rated 1 hp, single phase, 110 or 220 volts and normally furnished in a NEMA 1 metal enclosure. For control of a larger motor, it can also be supplied in a common enclosure with an auxiliary relay without overload protection or with a magnet starter that has overload protection.

Wiring diagrams and complete installation instruction are included with each control.

Type E1-S Electrodes - Made of brass or stainless steel, these 2" long electrodes are assembled in molded plastic insulating shields and suspended at desired levels in well by means of suspension wire.

RELAYS

Fig. NO.	Operation	Application	Unit Wt.	Price
	Pump Down	Submersible	4 LBS	
	Pump Up	Open Sys	4 LBS	

**CALL DUFF FIRST!****610-275-4453**

For additional information call: 610-275-4453 or Fax: 610-279-6299
Please call for current prices.

**SUSPENSION WIRE**

Designed to provide maximum strength and insulation, the wire is single conductor 18 gauge, 41 strand copper with 4/64" vinyl insulation.

FIG. NO.	PRICE
28163	

SUBGARD II LIQUID LEVEL CONTROL

**A GREAT PROVEN IDEA NOW EVEN
GREATER!**

The new Subgard II Ranger offers you more protection for your submersible pump than ever before possible. Greater circulation range. A greater range of applications including use in "sandy" well without the risk of jamming.

- * Level sensing float
- * Completely mechanical
- * Assures maximum water yield of the well at all times
- * Strongly and simply constructed
- * Prevents overpumping and pump burnout
- * No costly interruptions in service
- * Warranted for three full years
- * Available in sizes ranging from 1" through 4" riser pipes

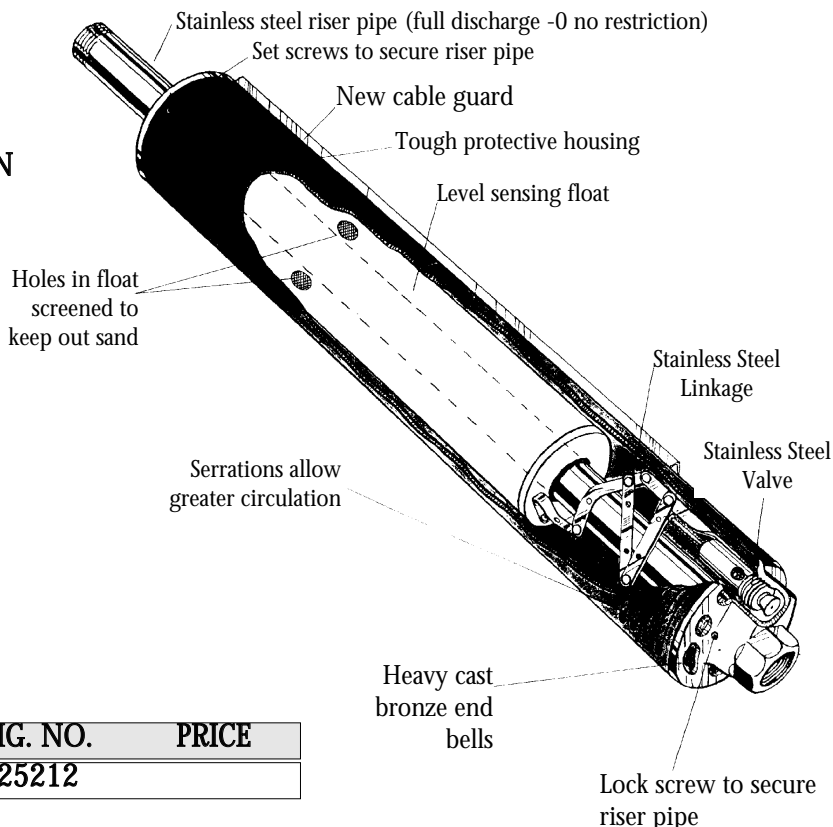
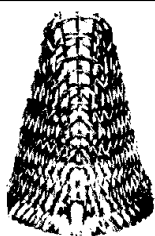


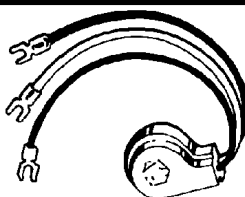
FIG. NO.	PRICE
25212	



EJECTOR SCREEN

Protects jet pumps against plugged nozzles clogged venturis. Installs easily in discharge side of ejector.

SIZE	FIG. NO.	PRICE
Brass	10655	
SS	35863	



LIGHTENING SURGE ARRESTOR

Specify one Θ or three Θ . When lightning or voltage surge of 500 volts or more reaches the lightning arrestor, the metal oxide within the plastic casing begins conducting the surge to the ground, relieving the electrical pressure to the motor. Regular operation is resumed as soon as the surge is passed to the ground.

DESCR	FIG. NO.	PRICE
1 Θ	8049	
3 Θ	10940	

COYOTE PROTECTS PUMPS AND MOTORS from RUNNING DRY

All above ground, no plumbing, no probes. Works on both 2 and 3 wire motors. Covers a wide horsepower range. Restarts automatically with adjustable timer. Operates alone or with pressure switches, float switches, or tank pump-up controls. Contacts to activate alarm available as an option. 3 Phase also available. CALL FOR SPECS!



DESCR	FIG. NO.	PRICE
1/3 to 1 HP, 115V	30070	
1/3 to 2 HP, 230V	30071	

TECHNICAL SPECIFICATIONS

Nominal Voltage	115V	230V
Operating Range	90V-130V	180V-260V
Horsepower Rating	1/3-1	1/3-2
Trip delay	1.5 seconds	1.5 seconds
Reset delay	adjustable 15 min.-5 hrs.	adjustable 15 min.-5 hrs.
Operating temperature	-20 to 75°C	-20 to 75°C
Trip % of normal load	adjustable 80 - 86%	adjustable 80 - 86%

Model 115 V
1/3 - 1 HP



Model 230 V
1/3 - 2 HP



MOTOR CONTROLS & ACCESSORIES

Franklin Submersible Motor Controls**PumpTec Features:**

- For single phase motors 1/3 - 1 1/2HP, 115/230V, 2 or 3 wire.
- Protects against low-yield wells, drop in water level and low voltage.
- Manual or Auto Reset (2 min. - 90 min.)

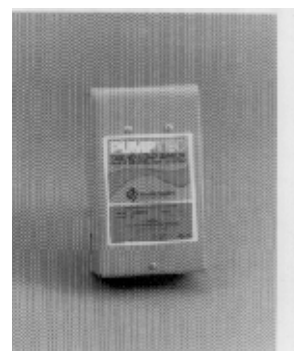
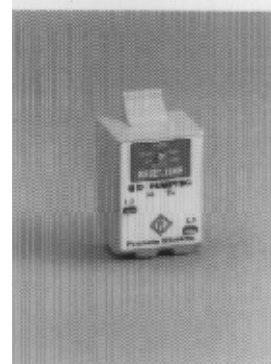
PumpTec Plus Features:

- For single phase motors 1/2 - 5HP, 230V, 2 or 3 wire
- Protects against low-yield wells, high or low voltage, drop in water level, rapid cycling, water logged tank.
- Manual or Auto Reset (1 min. - 4 hrs.)
- Run and Fault indicator lights.

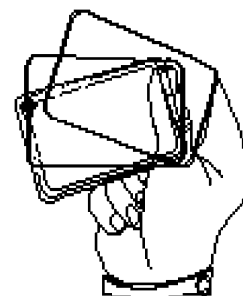
QD PumpTec Features:

- For Franklin 3-Wire single phase submersible motors 1/3-1HP, 230V.
- Protects against low-yield wells, drop in water level, broken shaft or coupling, clogged well screen, air or gas locked pump, and low voltage.
- Auto or manual reset
- Surge resistant.
- Moisture and insect resistant.
- Solid state electronic circuitry.
- Mounts in existing Franklin Control Box.

FIG. NO.	MODEL NO.	WT.	PRICE
42781	Pump Tec	3	
48773	Pump Tec Plus	6	

*Pump Tec**Pump Tec Plus*

DUFF IS HAPPY TO
ACCEPT
VISA AND MASTERCARD!



4" FRANKLIN SUBMERSIBLE PUMP MOTORS

HP	PH	VOLTS	MAX THRUST (LBS)	FIG. NO.	PRICE
TWO WIRE (Control Box Not Required)					
1/3	1	115	650	6410	
	1	230	650	6421	
1/2	1	115	650	6418	
	1	230	650	6425	
3/4	1	230	650	6450	
1	1	230	650	6445	
1 1/2	1	230	650	6454	
THREE WIRE (Control Box Not Required)					
1/3	1	115	300	6460	
	1	230	300	6469	
1/2	1	115	300	6464	
	1	230	300	6471	
3/4	1	230	300	6476	
1	1	230	650	6480	
1 1/2	1	230	650	6486	
	3	200	650	44285	
	3	230	650	30059	
	3	460	650	30060	
	1	230	650	6489	
2	3	200	650	42801	
	3	230	650	6520	
	3	460	650	6526	
3***	1	230	1500	6497	
	3	200	1500	38928	
	3	230	1500	6529	
	3	460	1500	6534	
5***	1	230	1500	6503	
	3	200	1500	38916	
	3	230	1500	6538	
	3	460	1500	6543	
7 1/2	3	200	1500	47908	
	3	230	1500	41212	
	3	460	1500	41213	
10	3	460	1500	41214	

6" FRANKLIN SUBMERSIBLE PUMP MOTORS

HP	PH	VOLTS	MAX THRUST (LBS)	FIG. NO.	PRICE
5	1	230	1500		
	3	230	1500		
	3	460	1500		
7 1/2	1	230	1500	6513	
	3	200	1500	49132	
	3	230	1500	6547	
	3	460	3500	6551	
10	1	230	3500	30057	
	3	200	3500	49133	
	3	230	3500	6555	
	3	460	3500	6559	
15	1	230	3500	49134	
	3	200	3500	49135	
	3	230	3500	6564	
	3	460	3500	6569	
20	3	200	3500	21116	
	3	230	3500	6572	
	3	460	3500	6578	
25	3	200	3500	49136	
	3	230	3500	6584	
	3	460	3500	6586	
30	3	200	3500	49137	
	3	230	3500	44286	
	3	460	3500	44287	
40	3	460	3500	47400	
50	3	460	3500	47401	
60	3	460	3500	47402	

8" & 10" SUBMERSIBLE PUMP MOTORS

8 INCH					
40	3	460	10,000	47400	
50	3	460	10,000	47401	
60	3	460	10,000	47402	
75	3	460	10,000	47406	
100	3	460	10,000	27392	
125	3	460	10,000	47407	
150	3	460	10,000	47408	
175	3	460	10,000	67141	
200	3	460	10,000	67142	
10 INCH					
175	3	460	10,000	47435	
200	3	460	10,000	47409	
250	3	460	10,000	47410	

DUFF CO.

MAGNETIC STARTERS

PUMPS

6" Dia. Motors

4" Dia. Motors

HP	VOLTS	STARTER SIZE	FURNAS AMB. COMP.	FIG. NO.	PRICE
1	200	00	K43	25591	
1/2	230	00	K41	21083	
	460	00	K29	66100	
	575	00	K27		
2	200	0	K50	20510	
	230	0	K49	25592	
	460	00	K33	74361	
	575	00	K29	66100	
3	200	0	K54		
	230	0	K52	25593	
	460	0	K37		
	575	0	K33	74361	
5	200	1	K61	25598	
	230	1	K61	25598	
	460	0	K49	25592	
	575	0	K42	25590	
7	200	1	K68	29722	
1/2	230	1	K67	25601	
	460	1	K55	25596	
	575	1	K52	25593	
	460	1	K58	76390	
	575	1	K55	25596	

Magnetic Starters

Non-reversing with reset bimetal type thermal overload relay; NEMA1 General Purpose Enclosures; 600 volts AC Maximum; 3-phase; 3-pole; 3-bimetal overloads.
CALL FOR SIZING & PRICES.

HP	VOLTS	STARTER SIZE	FURNAS AMB. COMP.	FIG. NO.	PRICE
5	200	1	K61	25598	
	230	1	K61	25598	
	460	0	K49	25592	
	575	0	K42	25590	
7 1/2	200	1	K68	29722	
	230	1	K67	25601	
	460	1	K55	25596	
	575	1	K52	25593	
10	200	1 3/4	K72	10606	
	230	1 3/4	K70	10601	
	460	1	K58	76390	
	575	1	K55	25596	
15	200	2 1/2	K76	17465	
	230	2	K75	10717	
	460	1 3/4	K64	25600	
	575	1 3/4	K61	25598	
20	200	3	K78	10651	
	230	2 1/2	K77	10628	
	460	2	K69	25602	
	575	2	K64	25600	
25	200	3	K86	10692	
	230	3	K83	69320	
	460	2	K72	10606	
	575	2	K69	25602	
30	200	3 1/2	K88	74629	
	230	3	K72	10606	
	460	2 1/2	K69	25602	
	575	2 1/2	K88	74629	
40	460	3	K87	10672	
	575	3	K74	10680	
50	460	3	K72	10606	
	575	3	K77	10628	

CONTROL BOXES

HP	VOLTS	FIG. NO.	MODEL #	PRICE
----	-------	----------	---------	-------

FRANKLIN For 4-Inch Motors

1/3	115	6590	F280 10 201	
	230	6597	F280 10 301	
1/2	115	6592	F280 10 401	
	230	6602	F280 10 501	
3/4	230	6605	F280 10 701	
1	230	6606	F280 10 801	
1 1/2	230	6610	82.F 001	
2	230	6614	82.F 002	
3	230	6618	82.F 004	

FRANKLIN For 6-Inch Motors

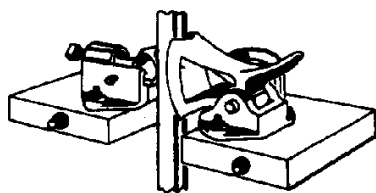
7 1/2	230	6623	82.F 008	
10	230	30328	82.F 010	

DELUXE CONTROL BOX WITH MAG CONTACT

FRANKLIN

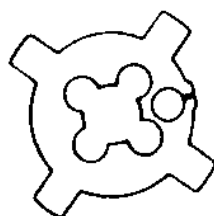
HP	VOLTS	MODEL # (Inches)	FIG. NO.	MODEL #	PRICE
2	230	4	43572	82.F 003	
3	230	4	43573	82.F 005	
5	230	4 & 6	41215	82.F 007	
7 1/2	230	6	43574	82.F 007	
10	230	6	43575	82.F 011	
15	230	6	52627	82.F 012	

PUMP ACCESSORIES

PIPE HOLDER

Holds pipe while it is being lowered or raised in well. Adjusts for 1", 1 1/4", 1 1/2", 2"

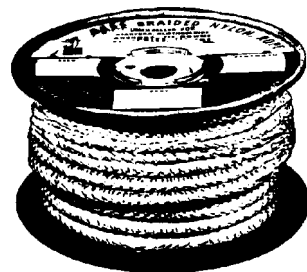
FIG. NO.	PRICE
10583	

CABLE GUARD

4" or 6" wells. Protects pump and cable.

This cable guard will keep the power cable from abrading against the casing or natural side of the well. A minimum of three to five should be used; one at the pump and one between 25' and 30' above the pump. Furnished in 6" size, although cut tabs permit this unique fitting to be used in 4" and 5" wells. This guard is made of polyethylene and will float. Therefore cable ties, retaining clamps or tape should be used over or under the cable guard.

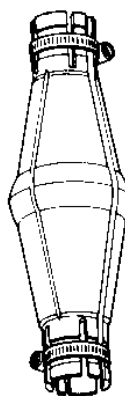
DESCRIPTION	FIG. NO.	PRICE
WG-6 Snap-in	10804	
WG-100 Self Clamping	43465	

SAFETY ROPE

- * 1800 LBS
- * Bursting Strength
- * 1000 ft rolls
- * For submersible pumps

DESCR	FIG. NO.	PRICE
FULL COIL	41255	
PER FT	10815	

**NO ORDER IS TOO
SMALL FOR OUR
PROMPT ATTENTION!**

TORQUE ARRESTOR TA-48

Precision molded from virgin rubber to provide the finest method available for protecting submersible pumps from starting torque damage. Deluxe torque arrestor is field-adjustable to hold pump centered in well, insuring a snug fit in all well casings from 4" - 8" ID. Two piece design installs quickly, eliminates flashing problems, and has a longer life. After easy casing adjustment,

the unit is securely fastened to 1" or 1 1/4" drop pipe with the two stainless steel clamps provided.

SPECIAL FEATURE

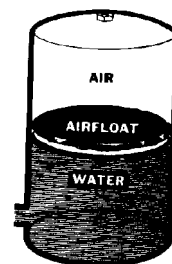
(Adjustable 4" to 8")

FIG. NO.	PRICE
10801	

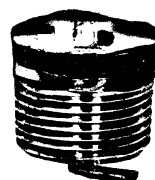
AIR FLOAT

Slips into any 1 1/4" opening

SIZE	FIG. NO.	PRICE
16	25164	
20	25331	
24	25332	

SCHRADER AIR VALVE

SIZE	FIG. NO.	PRICE
1/8	10607	
1/4	10608	

RUBBER BLEEDER

For submersible pump. 1" rubber inserts hand-tite in 1" tee.

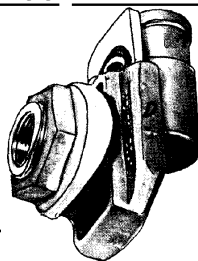
FIG. NO.	PRICE
20010	

PITLESS ADAPTERS

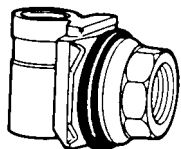
PITLESS ADAPTERS

Eliminates pit, seals out surface water, easy to service, no digging, easy to install, red brass.

SIZE	FIG. NO.	PRICE
1" Simmons	18121	
1 1/4	10627	
2	10637	
1 x 1 1/4	10649	



IMPORTED BRASS PITLESS ADAPTER



- * Red brass unit precision cast and machined to exacting Harvard specifications
- * One unit fits 5" to 7" well casing
- * Two neoprene gaskets furnished to

protect against outside contamination

- * Designed to support up to 900 lbs. of pipe filled with water plus pump
- * For 1" drop pipe
- * Individually packaged

Tested and meets PAS-1 standards

Brass Pitless adapters packaged with two rubber gaskets and lubricant.

FIG. NO.	PRICE
47964	

HEAVY DUTY PVC DROP COUPLING

Machined from extruded PVC stock.



SIZE	FIG. NO.	PRICE
1"	25320	
1 1/4"	29838	

HEAVY DUTY

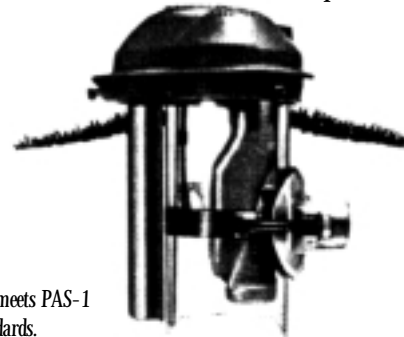
SIZE	FIG. NO.	PRICE
1"	49377	

SCH 80 PVC THREADED PIPE 20'

SIZE	FIG. NO.	PRICE
1"	25117	
1 1/4"	25186	

SNAPPY PITLESS ADAPTERS

For Submersible Pumps



Tested and meets PAS-1 standards.

Clear Hole - No restrictions in the casing installation and retrieval is easy.

Easily Set - Installation is fast. Self-locating, self aligning.

Corrosion Proof - All parts are lead free galvanized cast iron and ductile iron. No dissimilar metals to cause electrolytic or galvanic corrosion. exterior clamping band is all stainless steel.

Protected Potable Seal - Safe and second to none. Potable Oring seal is inside casing fitting, located between accurately machined sealing surfaces beyond the inside wall to the well casing, and is safe from damaging contact with well tools, drop pipe, etc.

Snappy adapters available in combination with ventilated or watertight caps.



Bulldog Brass Pitless Adapter



Bulldog Casing Fitting & Clamp



Bulldog Weld-on Casing Fitting

FIG. NO.	WELL CASING ID (INCHES)	DROP PIPE SIZE (INCHES)	PRICE
10741	4	1	
10744	4	1 1/4	
63300 (3 pack)	4	1	

4 X 1 BULLDOG PITLESS

Same as Snappy except all brass.

FIG. NO.	PRICE
45140	

DOMESTIC PITLESS KIT

DQ SERIES FULL PITLESS KITS consist of the double kwiconect discharge body and spool with o-rings. Cap must be ordered separately.

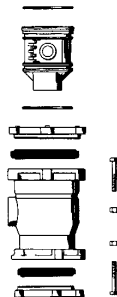


FIG. NO.	PRICE
46929	

MAASS MODEL J PITLESSES ARE SANITARY AND EASY TO SERVICE

Recommend to your customers the Maass Model J pitlesses — units create easy well service for you because they are manufactured only of RUST-PROOF materials and designed to eliminate all obstructions in well casing. Pump is easy to pull because of non-rusting components. Water contacts only 304 stainless steel and bronze to COMPLETELY ELIMINATE ANY RUST and/or ELECTROLYSIS. The Maass pitless connection is sealed by using a bronze 8 degree non-locking taper wedge with O-ring forced against 304 non-magnetic stainless steel flanged nipple pressed into steel housing and welded on outer side. Model J Pitless Adapter is non-pressure lifting and is designed for deep wells, higher working pressures, and where plastic pipe is used and high water levels. No lock necessary. Stock only two 1-inch outlet size Maass Model J pitlesses to fit all well casing sizes. Pitless steel housing is permanently installed by welding onto well casing.



MODEL JJ

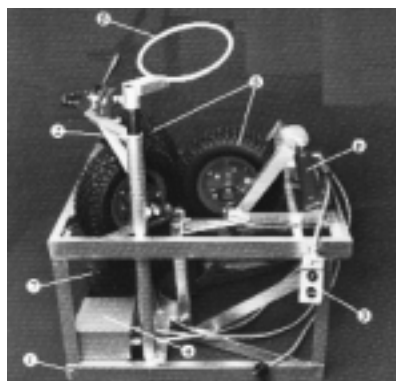
MODEL JJ models below are for suction pumps. Lateral can be pressurized to meet state codes.

WELL CASING SIZE	MODEL	WATER OUTLET & DROP PIPE SIZE
4"-5"	JJ	1" outlet 2" lateral
6"-7"-8"	JJ	1" outlet 2" lateral
4"-5"	JJ	1 1/4" outlet 2" lateral
6"-7"-8"	JJ	1 1/4" outlet 2" lateral

WELD-ON UNITS

WELL CASING SIZE	MODEL	WATER OUTLET & DROP PIPE SIZE	APPROXIMATE WEIGHT
4"-5"	J	1"	6#
4"-5"	J	1 1/4"	7#
4"-5"	J	1 1/2"	8.5#
5"	J	2"	12#
6"-7"-8"	J	1"	6#
6"-7"-8"	J	1 1/4"	7#
6"-7"-8"	J	1 1/2"	8.5#
6"-7"-8"	J	2"	12#
6"-7"-8"	J	2 1/2"	18#
8"-10"-12"	J	3"	32#
10"-12"	J	4"	50#

UP-Z-DAZY PUMP PULLER



DESCRIPTION	FIG. NO.	PRICE
Model 30XL aluminum heavy duty (legs incl)	22378	
Model 20XL aluminum (legs incl)	22377	
Model 10XL aluminum (monitoring model)	40688	
Model 2010 cable with attachment (fits all model 10-20-30 machines)	22379	
Wheel kit (fits all model 10-20-30- machines)	22380	
Overhead guide	22381	
Vise complete with vise arm	22382	
Leg kit (fits model 30XL-20XL; extends to 7 inches)	37881	

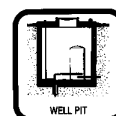
For additional information call: 610-275-4453 or Fax: 610-279-6299
Prices are a guide only. Please call for current prices.

WHY A PITLESS UNIT?

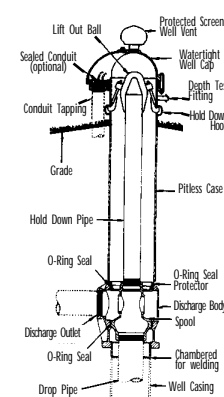
The standard above ground "Wall House" or "Well Pit" left much to be desired as solutions to sanitation, convenience and freeze protection.

Monitor (A Division of Baker Manufacturing) developed the first solution to eliminate the "well house and well pit" - with the Pitless Adapter and Pitless System.

The Pitless system allows the water to be directed to the service underground below the frost line, thus preventing any form of surface contamination.



STANDARD

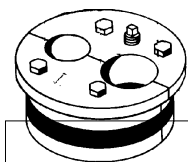


Monitor

A Division of:
BAKER
manufacturing company

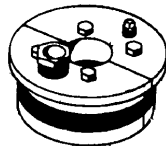
INDUSTRIAL PITLESS ADAPTER UNITS

WELL SEALS AND CAPS



DOUBLE HOLE JET PUMP

WELL SIZE	PIPE SIZE	CAST IRON		ABS	
		FIG. NO.	PRICE	FIG. NO.	PRICE
3"	1 X 3/4	36276	-	-	-
4"	1 X 1	35694	-	-	-
4"	1 1/4X1	10724	-	42503	-
5 5/8"	1 1/4X1	23090	-	-	-
6"	1 1/4X1	10739	-	28162	-
6"	1 1/4X1 1/4	19758	-	-	-
6 1/4"	1 1/4 X 1	35695	-	-	-
6 1/2"	1 1/4 X 1	34717	-	-	-
6 5/8"	1 1/4 X 1	38705	-	-	-
6"	1 X 1	49182	-	-	-
6"	1 X 3/4	51452	-	-	-



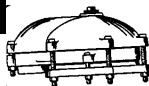
SINGLE HOLE JET PUMP

WELL SIZE	PIPE SIZE	CAST IRON		ABS	
		FIG. NO.	PRICE	FIG. NO.	PRICE
3"	1	36275	-	-	-
4"	1	10718	-	28160	-
4"	1 1/4	10720	-	-	-
4"	2	25894	-	-	-
5"	1	35693	-	-	-
5 5/8"	1	10730	-	-	-
5 5/8"	1 1/4	27370	-	-	-
6"	1	10734	-	28161	-
6"	1 1/4	10737	-	35697	-
6"	2	22181	-	-	-
6 1/4"	1	25201	-	-	-
8"	1	25504	-	-	-
8"	3	25446	-	-	-



WELL CAPS

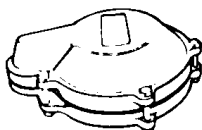
PREMIUM WATERTIGHT CAP



A truly watertight cap. The top of the cap can be removed without effecting the seal, conduit or wiring. Painted green and oven dried.

ID Casing Size	Max Case OD	Conduit Tap Size	Vent Tap Size	FIG. NO.
4"	4.545	1 1/2	1	30005
6"	6.69	1 1/2	1 1/4	25296

TURTLE WATERTIGHT CAP



A two piece cast iron cap that features an O-ring seal on the well. Top of the cap removes for easy well servicing. Standard series cap attaches to steel well casing with three square head bolts. Series cap for PVC casing attaches by solvent welding. Vermin resistant. Painted green and oven dried.

DESCR	FIG. NO.	PRICE
Plastic	52570	
Cast Iron	63299	

6" CAST IRON WELL CAP



1/4" grounding lug on ring meets national electric code requiring grounding of submersible pump.

Nom Well Size	Casing OD	FIG. NO.	PRICE
6&6	1/4	6-5/8	48536

ALUMINUM/ABS WELL CAP (low profile)

Constructed of injection-molded ABS plastic and aluminum. Cap base can be solvent welded directly to PVC well casing. 6-1/4" PVC.

FIG. NO.	PRICE
47616	



ALUMINUM WELL CAP

1/2" padlock locator holes to maintain well security.

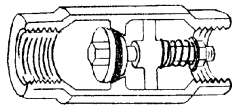
FIG. NO.	PRICE
23803	

MULTI-SIZE SUBMERSIBLE WELL CAP

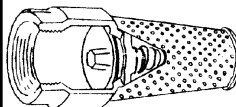


One size fits 5-5/8", 6", 6 1/4", heavy cast iron construction, Bright red for easy site location. Quick installation. Individually packaged.

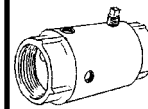
FIG. NO.	PRICE
10753	

FOOT AND CHECK VALVES**BRASS CHECK VALVE**

SIZE	FIG. NO.	PRICE
1/2	10474	
3/4	10479	
1	10482	
1 1/4	10485	
1 1/2	10487	
2	10491	
2 1/2	10496	
3	10500	
4	10505	

BRASS FOOT VALVE

SIZE	FIG. NO.	PRICE
1/2	10441	
3/4	10448	
1	10453	
1 1/4	10455	
1 1/2	10459	
2	10461	
2 1/2	10464	
3	10467	
4	10472	

CONTROLLER CHECK VALVE

Eliminates the Tank Tee
With two and four tappings:
One for two 1/4" switch and
gauge and two 1/8" snifter
valve and 18" drain plug.

TWO HOLE FOUR HOLE

SIZE	FIG. NO.	PRICE	FIG. NO.	PRICE
1	10527		10514	
1 1/4	10532		10517	
1 1/2			10524	
2			10525	

BRADY FOOT AND LINE CHECK VALVES

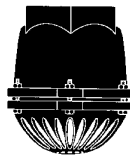
- 1) Nose Cone diffuser
- 2) Clapper
- 3) Sealing ring
- 4) Valve seat
- 5) Strainer (With strainer removed, any Brady Foot becomes a Line Check, which will operate in vertical, horizontal or inverted position)

**MADE OF
ABS
PLASTIC**

**FOOT
VALVES**

**CHECK
VALVES**

SIZE	FIG. NO.	PRICE	FIG. NO.	PRICE
3/4	37652		37653	
1	10677		10699	
1 1/4	10681		10710	
1 1/2	10685		10715	

GALVANIZED FOOT VALVES

SIZE	FIG. NO.	PRICE
1 1/4	10585	
1 1/2	10589	
2	10592	
2 1/2	10595	
3	10597	
4	10600	
5	10602	
6	10604	

GALVANIZED DRIVE COUPLING

PIPE SIZE	FIG. NO.	PRICE
1 1/4	18972	
1 1/2	18973	
2	18974	

4-FOR-1 FOOT VALVE

For jet pump, versatile; fits
3/4" through 1-1/4",
Corrosion proof

MADE OF ABS PLASTIC

FIG. NO.	PRICE
23173	



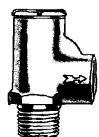
PUMP BYPASS RELIEF VALVE. Recommended for unloading operating on oil, chemical, non-corrosive substances and water lines. Used for pump bypass relief, open tank discharge and pump closing relief. **CAUTION: SHOULD NOT BE USED AS EMERGENCY OR SAFETY RELIEF VALVE.**

Found in the following applications:
Water pump bypass, Irrigation,
Sprinkler system on golf courses
Fountains, Fire protection systems
ADJUSTABLE 25-100 LB

WELL POINT

SIZE	FIG. NO.	PRICE
1 1/4X24	17812	

CALL FOR OTHER SIZES!

PRESSURE RELIEF VALVE

For pumps, tanks, etc.
* Set at 75 lbs.

100LB ALSO
AVAILABLE!

SIZE	FIG. NO.	PRICE
1/2	10617	
3/4	10620	

SIZE	FIG. NO.	PRICE
1/2	47308	
3/4	47310	
1	47312	
1 1/4	47314	
1 1/2	47316	
2	47318	
2 1/2	47320	
3	47322	

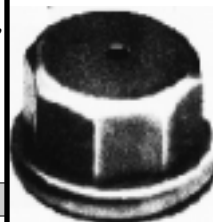
DRIVE CAP

FIG. NO.	PIPE SIZE	PRICE
18975	1 1/4	
18976	1 1/2	
18977	2	

FLOMATIC ENVIRO CHECK UNLEADED VALVES



MODEL 80E ENVIRO-CHECK

Lead free bronze body
Threaded female x female connection
Non-spin acetal poppet
Stainless steel spring

SIZE	FIG. NO.	PRICE
1/2	8538	
3/4	65317	
1	65208	
1 1/4	65318	
1 1/2	65319	
2	65209	
2 1/2	9133	
3	9134	
4	65320	

UNLEADED ENVIRO-CHECK

FLOMATIC VALVES

The first lead-free bronze check valve, developed by Flomatic Corporation in order to protect potable water from lead contamination.

Nominal Chemistry	
Copper (Cu)	88%
Tin (Sn)	3.5%
Lead (Pb)	0%
Zinc (Zn)	7%
Nickel (Ni)	.5%
Bismuth	1%
*Lead free bronze alloy (Federally #1) less than 0.1% lead	



MODEL 80BE ENVIRO-CHECK

Same as 80E with two drilled and tapped holes 1/8" inlet side and 1/4" outlet side

SIZE	FIG. NO.	PRICE
1	65210	
1 1/4	9139	
1 1/2	39056	
2	39057	



MODEL 80XBE ENVIRO-CHECK

Same as 80E
With two 1/4" tapped holes on outlet side for pressure switch and gauge

SIZE	FIG. NO.	PRICE
1	65325	



MODEL 80CE ENVIRO-CHECK

Same as 80E
Control center for submersible pump installations with four tappings, one 1/8" inlet side, two 1/4" outlet side and one 1/8" outlet side with brass plug

SIZE	FIG. NO.	PRICE
1	65321	
1 1/4	9163	
1 1/2	9145	
2	65322	



MODEL 80ME ENVIRO-CHECK

Submersible pump check valve
Lead free bronze (FEDRALLOY #1) body.

SIZE	FIG. NO.	PRICE
1	65324	



MODEL 100E Bronze In-Line Check Valve

Easy wrenching hex bronze body construction. High strength acetal poppet, stainless steel spring, Buna-N seal. 1".

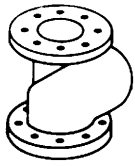
SIZE	FIG. NO.	PRICE
1"	33004	



MODEL 60s BRONZE FOOT

Cast bronze body
Threaded female connection
Features a NITRILE (Buna-N) seal
Acetal/bronze poppet, stainless spring and screen

SIZE	FIG. NO.	PRICE
1/2	8413	
3/4	8435	
1	65311	
1 1/4	65312	
1 1/2	65313	
2	65314	
2 1/2	8509	
3	8522	
4	8529	



MODEL 50 BALL CHECK

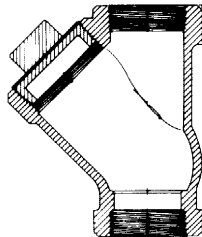
Cast iron body threaded female x female connection. Corrosion resistant Phenolic

"sinking ball. Temp Max. 180 ° F Pressure Max. 150 PSI.

SIZE	FIG. NO.	PRICE
1	D172039	
1 1/4	D172040	
1 1/2	D172041	
2	D172042	
2 1/2	D172043	
3	D172044	
4*	D172045	

*Flanged

Also available with "floating ball" for flood control or air vent (Model 50F)



MODEL 208 BALL CHECK

Cast iron uni-body with clean-out port threaded female x female connection. Features NITRILE (Buna-N) "sinking ball". Temp Max. 180 ° F Pressure Max. 150 PSI.

SIZE	FIG. NO.	PRICE
1 1/4	D172141	
2	D172142	

CHECK VALVES

MODES 208T/208S PVC BALL CHECK

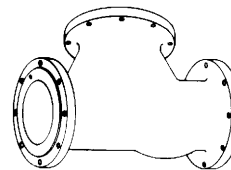


Corrosion resistant

PVC body threaded female x female connection NITRILE (Buna-N) self-cleaning ball. EZ access port with nitrile seal. Temp. Max 180oF Pressure Max. 150 PSI.

SIZE	FIG. NO.	PRICE
1	D172131T	
1 1/4	D172132T	
1 1/2	D172133T	
2	D172134T	

Also available with socket weld (slip). (Model 208S).



MODEL 408 BALL CHECK

Cast iron body and access port. Flanged connection ANSI 125 NITRILE (Buna-N) covered metal ball (sinking type), stainless fasteners

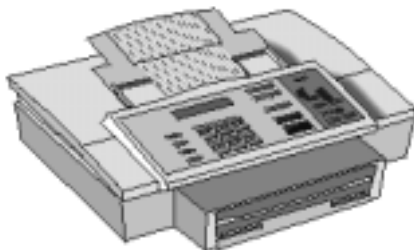
"Standard of the wastewater industry". Temp Max. 180° F Pressure Max. 150 PSI.

SIZE	FIG. NO.	PRICE
3	D172144	
4	D172145	
5	D172143	
6	D172146	
8	D172147	
10	D172148	
12	D172149	
14	D172150	

Also available with "floating ball" for "anti-flooding" (Model 408F)

FAX YOUR ORDER!

610-279-6299



STAINLESS STEEL INSERT FITTINGS & VALVES

STAINLESS STEEL INSERT FITTINGS

ALL MACHINED FROM 316 ALLOY STAINLESS STEEL PIPE

SIZE FIG. NO. PRICE

MALE ADAPTER



1/2	50487
3/4	MASS-3
1	48688
1 1/4	MASS-5
1 1/2	MASS-6
2	MASS-8

EXTRA LONG MALE ADAPTER



1	37862
1 1/4	37863

REDUCING MALE ADAPTER (MPTXINSERT)



1 1/4 X 1	62983
-----------	-------

EXTRA LONG REDUCING MALE ADAPTER (MPTXINSERT)



1 1/4 X 1	RASS5-4
-----------	---------

COUPLING



1	CSS4
1 1/4	CSS5

HEX BUSHING (MPTXFPT)



1 1/4 X 1	6960
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STAINLESS STEEL VALVES



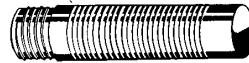
MODEL 100MSS ENVIRO-CHECK

303 Stainless Steel on piece body construction
High strength acetal poppet
(optional Tefzel poppet for corrosive liquid available.
Stainless Steel spring, Buna-N seal. MALE X FEMALE.

SIZE	FIG. NO.	PRICE
1/2" Mx 1/2" F	47564	
3/4" Mx 3/4" F	17-4218SS	
1" Mx 1" F	17-4220SS	
1 1/4" x 1" F	17-4221SS	
1 1/4" Mx 1 1/4" F	17-4242SS	
1 1/2" Mx 1 1/2" F	17-4232SS	

STAINLESS STEEL WELL

SCREEN



STAINLESS STEEL CASING

TYPE 304 STAINLESS STEEL



SIZE	FIG. NO.	PRICE
1 1/4" X 5'	SSS0105	
1 1/4" X 10'	SSS0110	
2" X 5'	SSS0205	
2" X 10'	SSS0210	
4" X 5'	SSS0405	
4" X 10'	SSS0410	
5" X 5'	SSS0505	
5" X 10'	SSS0510	
6" X 5'	SSS0605	
6" X 10'	SSS0610	
8" X 5'	SSS0805	
8" X 10'	SSS0810	

Stainless points, threaded plugs, threaded caps and slip caps also available!

STAINLESS STEEL BAILERS

SIZE	FIG. NO.	PRICE
1 1/4" X 21"	SSB0121	
1 1/4" X 39"	SSB0139	
2" X 20"	SSB0220	
2" X 36"	22B0236	



STAINLESS STEEL CHECK VALVE



304 Stainless Steel Body
304 Stainless Steel
Poppet
Viton "O" Ring Seal
(NITRILE Buna-N)
FEMALE X FEMALE

SIZE	FIG. NO.	PRICE
3/4"	17CVSS75	
1"	80358	
1 1/4"	17CVSS125	
1 1/2"	17CVSS150	
2"	17CVSS200	
3"	17CVSS300	
4"	17CVSS400	

STAINLESS STEEL FOOT VALVE



Stainless Steel Body and
Poppet
Stainless Steel Screen
Viton "O" Ring Seal

SIZE	FIG. NO.	PRICE
1/2"	17FVSS50	
3/4"	17FVSS75	
1"	17FVSS100	
1 1/4"	17FVSS125	
1 1/2"	17FVSS150	
2"	17FVSS200	
3"	17FVSS300	
4"	17FVSS400	

MALE ADAPTER

STEEL			BRASS	
SIZE	FIG. NO.	PRICE	FIG. NO.	PRICE
1/2	10887		11203	
3/4	10892		11205	
1	10897		11208	
1 1/4	10906		11210	
1 1/2	10917		11212	
2	10923		11214	
2 1/2	18301	-	-	-
3	20023	-	-	-
4	20024	-	-	-
6	20025	-	-	-

COUPLING

STEEL			BRASS	
SIZE	FIG. NO.	PRICE	FIG. NO.	PRICE
1/2	11136		11216	
3/4	11139		11217	
1	11140		11218	
1 1/4	11142		11220	
1 1/2	11144		11221	
2	11146		11222	

VENTURI MALE ADAPTER

STEEL			BRASS	
SIZE	FIG. NO.	PRICE	FIG. NO.	PRICE
1 X 8	11175		19644	
1 1/4 X 8	11176		19645	

**FOR INSERT
FITTINGS
AND POLY
PIPE,
PLEASE SEE
PAGES
610-611**

METAL INSERT FITTINGSBRASS TEE

Fabricated

SIZE	FIG. NO.	PRICE
3/4		
1		
1X3/4		
1 1/4		
1 1/4X1		
1 1/2		

**AVAILABLE
BY
SPECIAL ORDER**

ONE PIECE ELL

Brass

SIZE	FIG. NO.	PRICE
3/4	23524	
1	23525	
1 1/4	22462	
1 1/2	23526	

FEMALE ADAPTER

STEEL			BRASS	
SIZE	FIG. NO.	PRICE	FIG. NO.	PRICE
1/2	11181		11224	
3/4	11183		11225	
1	11185		11227	
1 1/4	11187		11229	
1 1/2	11189		11231	
2	11190		11232	

EXTRA LONG COUPLING

STEEL			BRASS	
SIZE	FIG. NO.	PRICE	FIG. NO.	PRICE
1	35845		33203	

EXTRA LONG ADAPTER

Size	Fig. No.	Price
BRASS		
1	11246	
1 1/4	11247	
STEEL		
1	11241	
1 1/4	11243	

CAST ROPE ADAPTER

Brass



SIZE	FIG. NO.	PRICE
1	18149	

REDUCING ADAPTER

Brass



SIZE	FIG. NO.	PRICE
1 X 3/4	47415	-
1 1/4 X 1	11251	

WELL SEAL ELLS

Insert X Insert

SIZE	FIG. NO.	PRICE
1	11194	
1 1/4	11196	

Insert X Male

SIZE	FIG. NO.	PRICE
1	34097	
1 1/4	11197	

WE'RE WAITING FOR YOUR CALL!

610-275-4453

PUMP ACCESSORIES

BRADY



NON-REPAIRABLE

FIG. NO.	TANK CAP	TANK CONN	PUMP CONN	PRICE
10758	45	1/4 MPT	1/4 M COMP	
10770	80	1/4 MPT	1/8 FIP	
10761	120	3/8 MPT	1/4 M COMP	
10764	120	3/8 MPT	1/8 FIT	

TYPE ALL PLASTIC DEEP WELL AIR RELEASE

Maintains proper ratio of air to water in submersible water systems. All polyethylene construction, including float, will not corrode - includes gauge port and 0-40 lb. limited bleed adjustment



FIG. NO.	PRICE
32856	

DEEP WELL AIR RELEASE

Maintains proper ratio of air to water in submersible water systems. Deluxe deep well air release features ABS float and cast body which prevents galvanic action and pump tapping.



FIG. NO.	PRICE
10776	

PIPE WRAP TAPE



General purpose vinyl plastic tape

3M TEMFLEX. 2" wide x 100'.

Temperature range = -10°C/+80°C

DESCR	FIG. NO.	PRICE
10 MIL	82344	

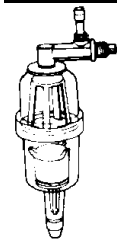
AIR VOLUME CONTROL TYPE

Type "L"
Preserves correct proportion of water and air in shallow well reciprocating pump systems. Includes tubing and fittings.



FIG. NO.	PRICE
10782	

JACUZZI JET CHARGER



This automatic jet charger is an effective device for maintaining the proper air charge in a pressure tank. It is suitable for use with deep and shallow well jet pumps, and on centrifugal and booster installations. Series 225A automatic jet charger is designed for maximum working pressure of 75 psig and is not recommended for tanks larger than 120 gallons.

FIG. NO.	PRICE
10798	

BACK CONNECTION PRESSURE GAUGE



SIZE	FIG. NO.	PRICE
1/8	10614	

PUMP PRESSURE GAUGE



*All brass and bronze movement
*Eliminates sticking and hanging up
*Easier to read
2" Dial 1/4" x 100 lb.

FIG. NO.	PRICE
10610	



TANK CROSSES

LONG TANK
CROSS-CAST

FIG. NO.	LENGTH	OUTSIDE	INSIDE	TOP	FRONT	PRICE
10548	10"	1X1X1	3/4"	1/4"	1/2"	

LONG TANK
CROSS-FABRICATED

FIG. NO.	LENGTH	OUTSIDE	INSIDE	TOP	FRONT	PRICE
25884	13"	1X1X1	3/4"	1/4"	1/2"	
10561	16"	1 1/4X1 1/4X1 1/4	1"	1/4"	1/2"	

WELL-X-TROL TANKS ARE
AVAILABLE IN SIZES UP TO
528 GALLONS IN VOLUME

CALL FOR ASME RATED TANKS

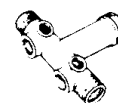
SHORT TANK CROSS

FIG. NO.	SIZE	PRICE
(Brass) 10577	1X3/4X3/4	
(Brass) 33936	1 1/4X1X1	

**PUMP OR TANK
PROBLEM?**

CALL DUFF!

**WE HAVE THE
SOLUTION!**

610-275-4453

SELECTION TABLE - WELL-X-TROL

OLD-STYLE PRES- SURE TANK SIZE (volume in gallons)	WELL-X-TROL MODEL NO.	PRESSURE SWITCH	
		WELL-X-TROL PRE- CHARGE PUMP CUT- IN PRESSURE	PUMP CUT-OUT PRES- SURE
6	WX-101	20 PSI	40 PSI
12	WX-102	20 PSI	40 PSI
20	WX-103	30 PSI	50 PSI
30	WX-200	30 PSI	50 PSI
30	WX-201	30 PSI	50 PSI
42	WX-202	30 PSI	50 PSI
82	WX-203	30 PSI	50 PSI
120	WX-250	30 PSI	50 PSI
225	WX-302	25 PSI	50PSI

For additional information call: 610-275-4453 or Fax: 610-279-6299
Please call for current prices.

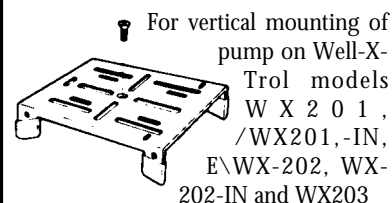
PUMP STAND

FIG. NO.	PRICE
10833	

Vertical mounting of pump on Well-
X-Trol models WX-250, WX-251 and
WX-252.

FIG. NO.	PRICE
44484	

RESIDENTIAL WELL-X-TROL TANKS

IN-LINE MODELS



MODEL NO.	DIMENSIONS		TOTAL VOLUME (GALS)	DRAWDOWN			SHIP WT (VOL LBS (CUFT))	FIG. NO	PRICE
	DIA (INS)	HEIGHT (INS)		20/40 (GALS)	30/50 (GALS)	40/60 (GALS)			
WX-101	8	12 5/8	2.0	.8	.6	.5	5 (0.6)	7764	
WX-102	11	15	4.4	1.6	1.4	1.2	9 (1.2)	7768	
WX-103	11	24 3/4	8.6	3.1	2.7	2.2	15 (2.0)	7771	
WX-104	15 3/8	17 3/8	10.3	3.8	3.2	2.8	20 (2.6)	7774	
WX-200	15 3/8	22	14.0	5.2	4.3	3.8	25 (3.3)	7780	



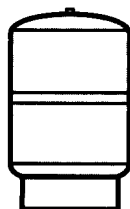
Precharge Pressure for WX-101 & WX-102 is 20 PSIG and Sys. Conn. is 3/4" NPTM.

Precharge Pressure for WX-103 is 30 PSIG and Sys. conn. is 3/4" NPTM.

Precharge Pressure for WX-104 and EX-200 is 30 PSIG and Sys.Conn. is 1" NPTM.

Maximum Working Pressure is 100 PSIG and Maximum Working Temperature is 200°F.

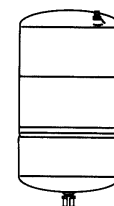
STAND MODELS



MODEL NO.	DIMENSIONS		TOTAL VOLUME (GALS)	DRAWDOWN			SHIP WT (VOL LBS (CUFT))	FIG. NO	PRICE
	DIA (INS)	HEIGHT (INS)		20/40 (GALS)	30/50 (GALS)	40/60 (GALS)			
WX-104-S	15 3/8	19 1/4	10.3	3.8	3.2	2.8	25 (3.0)	7777	
WX-201	15 3/8	23 7/8	14.0	5.1	4.3	3.7	27 (3.8)	7781	
WX-202	15 3/8	31 5/8	20.0	7.3	6.2	5.4	35 (4.9)	7784	
WX-203	15 3/8	46 3/8	32.0	-	9.9	8.6	43 (7.0)	7786	
WX-205	22	29 1/2	34.0	12.4	10.5	9.1	61 (9.5)	43262	
WX-250	22	35 5/8	44.0	16.3	13.6	11.9	69 (11.0)	7789	
WX-251	22	46 3/4	62.0	22.9	19.2	16.7	92 (13.9)	46830	
WX-302	26	47 3/16	86.0	31.8	26.7	23.2	123 (18.9)	29811	
WX-350	26	61 7/8	119.0	44.0	36.9	32.1	166 (24.5)	30032	



UNDERGROUND MODELS



MODEL NO.	DIMENSIONS		TOTAL VOLUME (GALS)	DRAWDOWN			SHIP WT (VOL LBS (CUFT))	FIG. NO	PRICE
	DIA (INS)	HEIGHT (INS)		20/40 (GALS)	30/50 (GALS)	40/60 (GALS)			
WX1250-UG	22	33 3/8	44.0	16.3	13.6	11.9	63 (11.0)	59993	
WX251-UG	22	44 1/2	62.0	22.9	19.2	16.7	83 (13.9)	76587	

Precharge Pressure for Models 200-UG and 202-UG is 30 PSIG ans Sys. conn. is 1" NPTF Coupling.
Precharge Pressure for Models 250-UG and 251-UG is 38 PSIG; Sys. Conn is 1 1/4" NPTF Coupling.
Maximum Working Pressure is 100 PSIG and Maximum Working Temperature is 200°F.



PUMP STAND MODELS

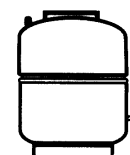


MODEL NO.	DIMENSIONS		TOTAL VOLUME (GALS)	DRAWDOWN			SHIP WT (VOL LBS (CUFT))	FIG. NO	PRICE
	DIA (INS)	HEIGHT (INS)		20/40 (GALS)	30/50 (GALS)	40/60 (GALS)			
WX-200-PS	17 1/4	15 5/8	14.0	5.2	4.3	3.8	29 (4.0)	41013	

Precharge Pressure is 30 PSIG ans Sys. conn. is 1" NPTF Coupling.
Maximum Working Pressure is 100 PSIG and Maximum Working Temperature is 200°F.



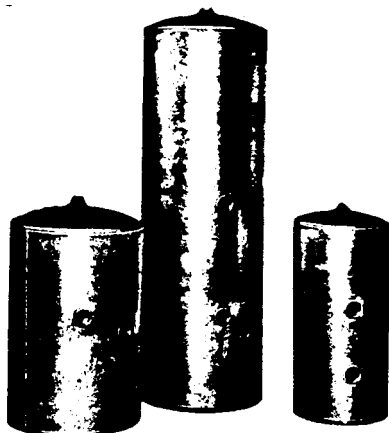
OFFSET CONNECTOR MODELS



MODEL NO.	DIMENSIONS		TOTAL VOLUME (GALS)	DRAWDOWN			SHIP WT (VOL LBS (CUFT))	FIG. NO	PRICE
	DIA (INS)	HEIGHT (INS)		20/40 (GALS)	30/50 (GALS)	40/60 (GALS)			
WX-201-OC	15 3/8	24 5/8	14.0	5.1	4.3	3.8	25 (3.8)	19812	



GALVANIZED PUMP TANKS



RETENTION TANKS

75# WORKING PRESSURE					150#
FIG. NO.	Capacity (actual gallons)	Diameter (inside)	Length (overall)	Weight Lbs.	FIG. NO. PRICE
25514	30	16	38	56	7869 35044 45438
7854	42T	16	50	67	
7858	42S	20	35	75	
7861	80	20	63	115	
7864	120	24	63	195	
23340	220	30	73	290	
42884	310	36	74	390	
42885	530	36	124	535	



STRUCTURAL Fiberglass Retention Tanks

Safe for the environment (No lead or other metals)
 Resists chemical attack and corrosion
 Seamless, uniform inner shell made of NSF listed poly-ethylene
 No tank coatings needed
 Same high strength steel, with about half the weight
 Easy to handle and install
 75 psig operating pressure
 1 1/4" NPT connection on top and bottom (custom openings also offered).
 Five year warranty from date of manufacture.

FIG. NO.	Capacity (gallon/litre)	Height (inches)	Diameter (inches)	PRICE
47942	80	67	21	
47943	120	73	24	

GLASS LINED RETENTION TANKS

50798	RT42T
50799	RT80T
50800	FT120T

Epoxy Coated Retention tanks

Baked on finish Epoxy coat inside Oven baked outside

Typical Installation w/Chemical Feed Pump

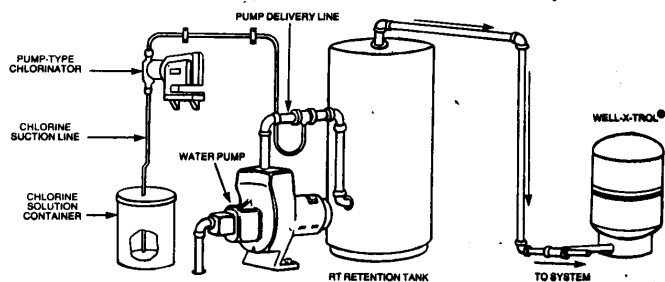
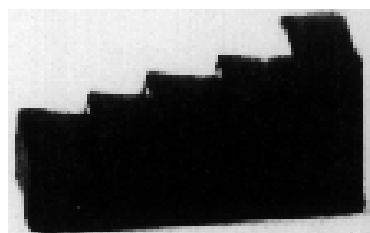


FIG. NO.	Capacity (gallon)	Size (D" X H")	Approx. weight, Lbs.	PRICE
50799	80	20x64	84	
50800	120	24x66	139	



TANK LEGS

Elevates tank above floor
 Levelled on uneven floors

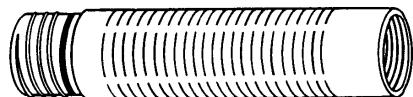
FIG. NO.	PRICE
10574	



DUFF CO.

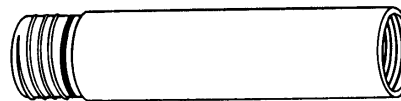
PUMPS

STANDARD SCH 40 PVC WELL SCREENS WITH MALE X FEMALE FLUSH THREAD



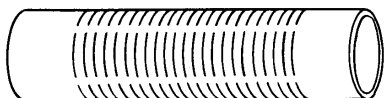
SIZE	.010 SLOT	PRICE	.020 SLOT	PRICE
2"x2 1/2'	48672		48679	
2"x5'	48673		48680	
2"x10'	48674		17811	
2"x20'	48675		48681	
4"x2 1/2'	48676		48685	
4"x5'	48677		43652	
4"x10'	17810		21261	
4"x20'	48678		48682	

STANDARD SCH 40 PVC CASING WITH MALE X FEMALE FLUSH THREAD (NON-SLOTTED)



SIZE	FIG. NO.	PRICE
2"x2 1/2'	30196	
2"x5'	30327	
2"x10'	48669	
2"x20'	48670	
4"x2 1/2'	21266	
4"x5'	21264	
4"x10'	21267	
4"x20'	48671	

STANDARD SCH 40 PVC WELL SCREEN PLAIN ENDS (NON-THREADED)



SIZE	.016 SLOT	PRICE	.010 SLOT	PRICE	.020 SLOT	PRICE
2x10	52584	-	-	-	-	-
4x10	-	-	51609	-	51610	-

PVC FLUSH JOINT PLUGS



SIZE	FIG. NO.	PRICE
2"	30197	
4"	21262	

PVC FLUSH JOINT CAPS



SIZE	FIG. NO.	PRICE
2"	30195	
4"	21263	

CLEAR PVC BAILERS



SIZE	FIG. NO.	PRICE
11/4"x15"	PVCV215	
11/4"x36"	PVCB236	
11/4"x48"	PVCB248	



PURE GOLD BENTONITE

DESCR	FIG. NO.	PRICE
5 Gallon Pail	48683	
3/8 tablets		
50 LB bag chips	48684	
50 LB bag one step grout	25041	

MONITORING WELL MANHOLE



12 X 12 flush Mount Monitoring Well Manhole. The 8" EWP Manhole is intended to be used as an access port for monitoring well installed in a driveway. It is designed to help protect the well from any unauthorized access.

The Cover has the words "monitoring well" cast into it in large letters. Two bolts hold the cover tightly to the rim making it accessible only with a wrench. A Guna-N gasket prevents surface water or product from entering the contaminating the well. Inside diameter will accommodate up to a 4" well plug.

SIZE	FIG. NO.	PRICE
12X12	53406	
8X12	48686	

