







# Industrial Pumps Catalog A GLOBAL LEADER IN PUMP SOLUTIONS



2

# Contents

Stainless Steel

Model Variants

Introduction to Sanitary Pumps

Stainless Steel Sanitary Pumps

Impeller Replacement Guide

INDUSTRIAL PUMPS CATALOG

01 An Introduction to Pumps	4
How to Specify a Pump	6
CE Marking	7
Iconography	8
How Our Pumps Work	10
02 Centrifugal Pumps	14
Stainless Steel	16
Circulation	18
Mag Drive	21
Submersible	45
Submersible	
03 Diaphragm Pumps	48
03 Diaphragm Pumps	48
03 Diaphragm Pumps Introduction	48
03 Diaphragm Pumps Introduction Motor Driven	48 50 52
O3 Diaphragm Pumps Introduction Motor Driven Air Driven	48 50 52 70
O3 Diaphragm Pumps  Introduction  Motor Driven  Air Driven  Accessories & Fittings	48 50 52 70 76
03 Diaphragm Pumps Introduction Motor Driven Air Driven Accessories & Fittings  04 Flexible Impeller Pumps	48 50 52 70 76

111

118 120

128

130

05 Hand Pumps	138	
Portable & Manual	140	
06 Rotary Lobe Pumps	142	
Hygienic Pumps	144	
07 Oscillating Pumps	148	
Oscillating Pumps	150	
08 Sliding Vane Pumps	152	
Diesel Sliding Vane	154	
09 Specialty Products	156	
Blowers Bottled Water Systems Oil Changers	158 161 164	
10 Chemical Resistance Guide	168	
To Chemical Resistance Guide		
Introduction Chemical Resistance Guide	170 172	
Introduction		



6

# 01 An Introduction to Pumps

INTRODUCTION

### How to Specify a Pump

The first step toward selecting the right pump is to develop the specifications for the pump. This involves knowledge of the application and the chemical solution for pumping. The following tips will be helpful in determining the right pump for any specific application. Please refer to the engineering data and tables within this catalog to assist you in this process.

### **FLOW**

"Flow" is defined as the rate at which you want the liquid pumped. Several factors dictate the flow requirements in an application. Some of these are the size of the nozzle for spraying, cycle time for transferring and volume of the liquid per cycle for dispensing applications. In case there is a choice, it is always advisable to choose a lower flow rate which will increase the life and reliability of the pump.

### **HEAD/PRESSURE**

Head or pressure in combination with the flow rate determine the power of a pump needed for a given application. This is a simple calculation in cases where the discharge is at a higher level than suction, and is determined by the differential height between the liquid level on the suction and discharge side. The pressure needed may also be controlled by the flow required through a nozzle, or other restrictions in the delivery line such as a long or narrow tube. The frictional loss through the tube and the fitting dictates the pressure required at a certain flow. The required pressure also includes difference in the pressure of the suction and the discharge vessel when pumping into a higher-pressured vessel or from a vacuum. As always when pumping at pressure, make sure you choose a pump for the pressure needed in the system. It is also worth noting that high pressure requires pressure-rated tubing and fittings, adding to the cost of your overall system as well as the increased risk of leakage.

### CONTROL

What turns the pump on and off is an important consideration since running the pump longer than required reduces pump life. For applications where there is a closed valve or a spray wand with a trigger, it is advisable to use a demand pump with a pressure switch to shut the pump off when the valve is closed. Running a positive displacement pump against a dead head could cause immediate failure. For other applications, it is useful to have a bypass system to prevent failure. More complicated pump controls may involve sensors and electronics.

### **PUMP DRIVER**

The decision to choose the right driving source is generally dictated by availability. If the pump is to be motor or solenoid driven, you will need to know the voltage and the frequency of the power source. AC or DC governs the kind of motor needed. The oscillating pumps that run on the cycling of the AC supply cannot work with DC voltages. If you have air available and choose an air driven pump, you need to know the pressure and means of regulating the incoming air to the pumps. In flammable atmospheres, Xylem recommends using an air driven pump properly grounded to prevent the potential of explosion.

### **CHEMICAL COMPATIBILITY**

It is essential to get all the details, including the exact composition, temperatures and the concentration of the chemicals to be pumped. This information helps you choose the material of construction for the pumps for chemical compatibility. Corrosion causes leakage and failure. Refer to the chemical compatibility sheet in the back of the catalog as a guide. However, an actual soak test of the materials is strongly recommended before applying the pump.

### **PRIMING**

The pump needs to be primed when it is located above the level of the liquid or where a flooded suction cannot be provided. Most positive displacement pumps can self-prime as long as you stay within the limit of its priming capability. If that limit is exceeded, the pump will not prime and, hence, will not pump. This will lead to a condition where the pump runs without any liquid. This dry running will lead to early failure of the pump if it happens frequently and over extended periods of time.

### VISCOSITY

Viscosity is the internal property of fluid that offers a resistance to flow as it is placed under sheer or extensional stress. In general, it is the measure of the thickness of the fluid or of the fluid friction when trying to flow. For example, water is considered thin; it has low viscosity and can be pumped at higher volumes and speeds in positive displacement pumps. Oils are higher in viscosity and, therefore, the pump used or the volumes or pressures possible are lower. Apart from the type of liquid, many other factors can either reduce or increase the effect of a viscous fluid. Pump orientation, pump speed, port size, system pipe work dimensions and length can all have an effect.

It is worth noting that viscosity in fluid is also highly temperature dependent. For better pumping, high viscosity fluids can be pumped with certain agitation of the material. Agitation could be as simple as a slight stirring or heating of the medium, but care should be exercised if attempting to alter the viscosity for pumping. Each product to be transferred needs to be considered on its own design characteristics to agitation.

Other important considerations, such as the duty cycle, plumbing and ambient temperature all have a direct bearing on the performance of a pump and need to be clearly understood and defined.

THE IDEAL PUMP FOR YOUR INDUSTRY	This table will help you to identify the products which are most commonly used in your sector. Don't forget to look at the other pages too, as you may find something which meets your specific requirements.	8 Industrial Flexible Impeller Pumps	S Bronze Flexible Impeller Pumps	Hygienic Flexible Impeller Pumps	Rotary Lobe Pumps	Sliding Vane Pumps	8 Diaphragm Pumps	Centrifugal Pumps
PUMP	Chemical Suppliers & Users	•	•		•		•	•
DEAL	General Industry, Factory Plant	•	•		•	•	•	•
불	Water Treatment & Utilities	•	•			•	•	•
	Food Processing			•	•			
	Cosmetics & Pharmaceuticals			•	•			
	Dairy, Beverage & Soft Drinks			•	•		•	
	Construction Equipment		•			•	•	•
	Agricultural Equipment		•			•	•	•

### **CE Marking**



The CE marking is a mandatory conformity mark on many products placed on the single market in the European Economic Area (EEA). The CE marking certifies that a product has met EU health, safety and environmental requirements, which ensure consumer safety.

By affixing the CE marking, Xylem, its authorized representative or person placing the product on the market or putting it into service asserts that the item meets all the essential requirements of the relevant European Directive(s).

Products identified in this book as "CE" meet all the relevant requirements and have gone through either internal or external testing to evaluate the product and its documentation.

# 01 An Introduction to Pumps

ICONOGRAPHY

### Iconography



The industry-specific icons shown here serve the same purpose as road signs:

They are designed to help navigate through this catalog. The signs help to give direction and, hopefully, a better understanding of the products Xylem offers.

### **PRIMARY MARKETS**



### **AGRICULTURAL SPRAYING**

Many applications around the farm that require spraying; from crop/tree spraying to teat spraying. Product groups with this icon are designed to have the pressure and flow required for such applications.



### **CAR WASH**

Pumps designed for car washes are ideally suited for pumping both water and chemicals.



### **AUTOMOTIVE**

Pumps used in this application are perfect for the garage and also for washing car brakes, transmission fluid transfer, brake fluid change out and windshield washing.



### **CHEMICAL TRANSFER**

Products with this symbol are designed specifically for the harshness of a chemical transfer and to handle a full range of chemicals.



### **ASPHALT PAVING & SWEEPING**

Product types with this icon generally have specific products that are designed for the harsh environment and long duty of these applications.



### CONSTRUCTION

This icon represents products for the asphalt street sweepers, asphalt paving machines, chemical injection into concrete pouring systems and concrete cutting machines.



### **DIESEL REFUELING**

Products with this logo have been specifically designed for diesel refueling where durability and speed are key.



### **FLOOR CARE**

Pumps shown with this icon are used in commercial and consumer rental carpet cleaning machines, self-propelled hard surface scrubbers, water dumping systems and carpet pre-treat sprayers.



### **FOOD & BEVERAGE**

Specific products in this group are designed for food grade materials and range in applications from dispensing beer to pumping food over large distances.



### **PHARMACEUTICAL**

Products with this symbol have options designed specifically for the high grade of cleanliness necessary in the pharmaceutical world.



### FOREST

Refueling pumps are used on forestry machines (Harvesters and Forwarders) where environmental considerations are important. Pumps with this icon offer valves and auto shut-off devices.



### **ROAD COMPACTION**

Products in this category are particularly suited to road compaction vehicles where liquid spraying is required.



### **GENERAL PURPOSE**

These products have a large range of attributes from high volume water transfer to pumping chemicals.



### WATER

This symbol represents certain products for use with water transfer, water spraying or water systems.



### **PERSONAL CARE**

Hygienic processing pumps are designed to comply with the stringent requirements of the personal care/cosmetic industry. These pumps are ideal for processing cosmetics, creams, lotions and certain dietary products.

### **SECONDARY MARKETS**



HVAC



HAZARDOUS AREA ENVIRONMENTS



**ROBOTICS** 



STEAM



PROCESS APPLICATIONS



CRYOGENICS

# 01 An Introduction to Pumps

HOW OUR PUMPS WORK

### Centrifugal



Centrifugal pumps handle high volumes with a smooth and non-pulsating flow. The flow rate can be regulated from maximum output to no flow with no damage to the pump. An excellent pump for general transfer applications.

Low Maintenance: Few moving parts mean that wear due to operation is minimal.

**Easy Installation:** Compact size for flow rate. Option of port position simplifies pipe runs.

Versatility: Centrifugal pumps can be built in submersible form.

**Low Power Consumption:** Electric centrifugal pumps consume less power than most other pump types.

### **HOW DO THEY WORK?**

- The rotating impeller gives velocity energy to the liquid, moving it to the periphery of the volute casing and toward the discharge port.
- **2.** The volute casing discharge arrangement converts velocity energy into static pressure.
- Centrifugal pumps must be either initially primed or mounted in such a way that liquid is permanently available at the inlet port (e.g., submersible pumps).



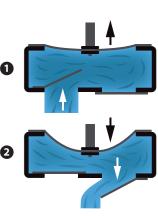
### Diaphragm



Xylem Flojet diaphragm pumps can be found in applications such as spraying, misting, carpet cleaning, water systems, chemical transfer, car wash and many other unique functions. Diaphragm pumps tend to be more robust as they can run dry for extended periods and also do not need a shaft seal, so there is less maintenance. Xylem Flojet diaphragm pumps come in two ranges – air/gas powered and electrically powered. Air/gas powered diaphragm pumps offer great life and superb flow with a small footprint. Electric diaphragm pumps are compact and have a huge range of options for wetted materials, voltage, pressure switch setting and flow. Diaphragm pumps must be used with a coarse strainer to avoid blocking the check valves.

### **HOW DO THEY WORK?**

- The diaphragm, pulled by the movements of a piston or a handle, causes a partial vacuum, opening the inlet port and closing the outlet, drawing in liquid.
- 2. Downward movement of the diaphragm pressurizes the liquid, closing the inlet valve and opening the outlet valve through which liquid is expelled by pressure.



### Mag Drive Centrifugal



Magnetically driven pumps handle products where leak-free transfer is a must, where high reliability is paramount and purity of the pumped medium must be maintained. The operation is identical to any centrifugal pump except that the need for the shaft seal is eliminated. This is accomplished by driving the impeller with a magnetic coupling rather than directly with the motor shaft. An excellent pump for chemical transfer applications.

Low Maintenance: Few moving parts mean that wear due to operation is minimal.

**No Shaft Seal:** Removes the leak path to and leak path from the medium being pumped.

**Easy Installation:** Compact size for flow rate.

### **HOW DO THEY WORK?**

- The rotating impeller gives velocity energy to the liquid, moving it to the periphery of the volute casing and toward the discharge port.
- The volute casing discharge arrangement converts velocity energy into static pressure.
- Centrifugal pumps must be either initially primed or mounted in such a way that liquid is permanently available at the inlet port (e.g., submersible pumps).



### Flexible Impeller



The flexible impeller pump combines the priming features of positive displacement type pumps with the general transfer ability of centrifugals. It will pump either thin or viscous liquids and can handle more solids in suspension than other types of rotary pumps. The pump can be mounted at any angle and will pump in either direction with equal efficiency.

Self-Priming: Pumps instantly with dry suction lifts up to 10' (3m) and up to 25' (8m) when wetted.

Simplicity: One moving part – a tough, long-life, wear-resistant flexible impeller.

**Flexibility:** The flexible impeller pump offers both high flow and high pressure according to motor and impeller design.

### **HOW DO THEY WORK?**

- As the flexible impeller blades contact the offset cam, they bend with a squeezing action that provides a continuous and uniform flow.
- **2.** As the impeller rotates, each successive blade draws in liquid and carries it from intake to outlet port.
- **3.** Flexible impeller blades create a nearly perfect vacuum for instant self-priming.



12

# 01 An Introduction to Pumps

HOW OUR PUMPS WORK

### **Rotary Lobe**



Xylem Jabsco lobe pumps use two counter-rotating rotors that create a steady, positive pumping action. As the rotors never touch each other or the pump case, Jabsco hygienic lobe pumps will not contaminate or degrade the fluid. What comes out is what goes in; no more, no less.

**Hygiene Standards:** Crevice-free designs, external gears and bearings, together with all-stainless-steel contact parts and high surface finishes, surpass users' hygiene and cleanability expectations.

**Reliability:** Lobe pumps offer long-term dependability with minimal cost of servicing and replacement parts.

**Application Capability:** Lobe pumps generate the highest pressures and flow rates delivered by any of the Xylem Jabsco product range. Highly viscous, shear-sensitive liquids and suspended soft solids will not be degraded.

### **HOW DO THEY WORK?**

- 1. Fluid is drawn into the pump and completely fills the space between the rotors.
- 2. Held between the rotor lobes and the pump case, closed cells of fluid are carried smoothly through the nump.
- The intermeshing rotor lobes positively displace the fluid volume, generating flow and overcoming the discharge pressure.



### Sliding Vane



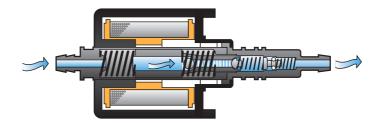
Sliding vane pumps are designed for the transfer of diesel fuel and light oils. Many have excellent priming capabilities that enable them to be mounted high on construction machines and prime through strainers and check valves.

### **HOW DO THEY WORK?**

- The rotor is eccentric to the rotor bore and the vanes slide outwards by the centrifugal force induced by the turning rotor.
- As the rotor turns from the top to the bottom of the body bore, a partial vacuum is created by the increasing volume of the cell. This allows atmospheric pressure to push liquid into the pump.
- 3. The liquid is then transferred to the discharge side of the pump. As the rotor turns from the bottom to the top of the body bore, pressure is created by the reducing volume of the cell and forces the liquid out of the discharge port.



### Solenoid



Building on our extensive experience in positive displacement pumps, Flojet's new PS Series Oscillating pumps provide a compact solution for low flow, high pressure applications

### **HOW DO THEY WORK?**

- 1. Solenoid pumps use an AC electrical coil rather than a motor to power the pumping action.
- 2. The AC voltage passes through a diode so that the voltage applied to the coil is positive polarity only and is effectively pulsed. This is known as a half wave rectifier.
- 3. Inside the pump, there is a metal plunger fitted between two springs, as this plunger moves backwards and forwards it move the liquid through the pump. A check valve in the outlet of the pump prevents backward flow of the liquid.
- 4. The metal plunger in the pump is magnetized and is pulled towards the inlet of the pump when the coil energizes. When the coil de-energizes, the plunger moves forward due to the springs. The action of the plunger moving backwards and forwards due to the coil energizing and de-energizing is the fundamental principle behind the operation of the pump.



STAINLESS STEEL



### Cyclone™ Stainless Steel Centrifugal Pump







### **GAS WARNING**

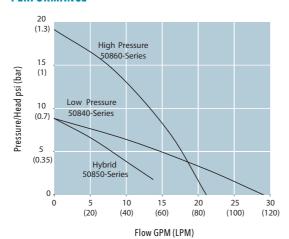
No pump manufactured by Xylem should be used for gasoline or any fluid with a flash point below 100°F (38°C).

The combination of reliability, performance, and silent operation is what makes the Cyclone™ range the class leader and is why these robust pumps are supported by many major customers and OEMs worldwide. The Hybrid Cyclone™ model was developed in response to industry application requirements and our customers' needs to increase the pump's versatility and performance criteria.

### **FEATURES**

- Heavy duty robust design
- Stainless steel construction
- Anti-clog impeller design · Long-life mechanical seal
- Long-life DC motor
- Silent running
- Single tool servicing
- . 6.6' (2m) suction lift when wet

### **PERFORMANCE**

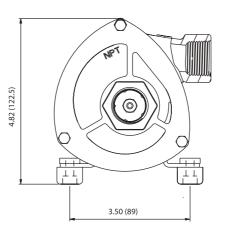


### **SPECIFICATIONS**

MODEL#	CERTIFICATION	DESCRIPTION	VOLTAGE	FUSE SIZE	PORT FITTING	OPEN FLOW	RECOMMENDED DUTY	MOTOR LIFE
50840-0012	CE	Cyclone low pressure	12V	10	3/4" (19mm) NPT	31 GPM (120 LPM)	Continuously rated	3500 hours
50840-0024	CE	Cyclone low pressure	24V	5	3/4" (19mm) NPT	31 GPM (120 LPM)	Continuously rated	3500 hours
50840-2012	CE	Cyclone low pressure	12V	10	3/4" (19mm) BSP	31 GPM (120 LPM)	Continuously rated	3500 hours
50840-2024	CE	Cyclone low pressure	24V	5	3/4" (19mm) BSP	31 GPM (120 LPM)	Continuously rated	3500 hours
50850-0012	CE	Cyclone hybrid	12V	7	3/4" (19mm) NPT	13 GPM (50 LPM)	Continuously rated	3500 hours
50850-2012	CE	Cyclone hybrid	12V	7	3/4" (19mm) BSP	13 GPM (50 LPM)	Continuously rated	3500 hours
50850-2124	CE	Cyclone hybrid	24V	5	3/4" (19mm) BSP	13 GPM (50 LPM)	Continuously rated	3500 hours
50860-0012	CE	Cyclone high pressure	12V	25	3/4" (19mm) NPT	21 GPM (80 LPM)	30 minutes on, 30 minutes off	2500 hours
50860-0024	CE	Cyclone high pressure	24V	15	3/4" (19mm) NPT	21 GPM (80 LPM)	30 minutes on, 30 minutes off	2500 hours
50860-2012	CE	Cyclone high pressure	12V	25	3/4" (19mm) BSP	21 GPM (80 LPM)	30 minutes on, 30 minutes off	2500 hours
50860-2024	CE	Cyclone high presure	24V	15	3/4" (19mm) BSP	21 GPM (80 LPM)	30 minutes on, 30 minutes off	2500 hours

### **50840 SERIES DIMENSIONAL DRAWINGS**

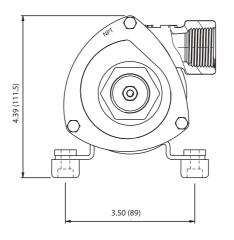
Unless otherwise stated, dimensions are in inches and (mm).

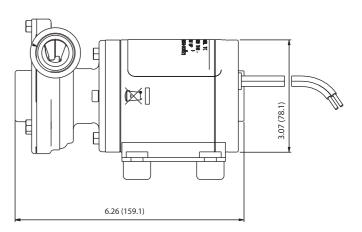


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### **50850 SERIES DIMENSIONAL DRAWINGS**

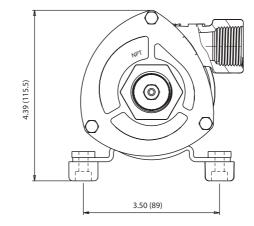
Unless otherwise stated, dimensions are in inches and (mm).

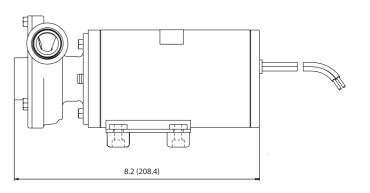




### **50860 SERIES DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).





CIRCULATION



### Commercial Circulation Pump 59510 Series

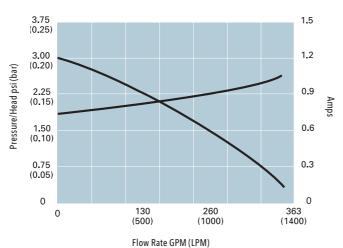




### **FEATURES**

- 3.3 GPM (12.5 LPM) @ 1.7 psi (0.12 bar)
- Magnetic drive sealed pump chamber
- Ignition protected
- Meets EMC requirements
- Connections for 3/4" (19mm) ID hose
- Continuously rated
- Pumps water at 212°F (100°C)
- Long-life brushless DC motor

### **PERFORMANCE**

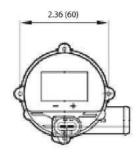


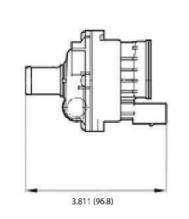
### **MODELS**

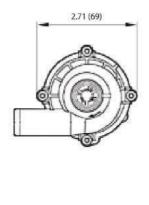
MODEL#	CERTIFICATION	VOLTAGE	FUSE SIZE	CURRENT DRAW	CABLE LENGTH	MINIMUM	WIRE SIZE
59510-0012	CF	12V DC	2 ^	1.2A	0-27'(0-8m)	0.1in <sup>2</sup> (2.5mm <sup>2</sup> )	AWG 12
37310-0012	CE	12V DC	2A	I.ZA	27-50' (8-15m)	0.16in <sup>2</sup> (4mm <sup>2</sup> )	AWG 10

### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).







### Commercial Circulation Pump 59520 Series



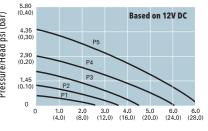




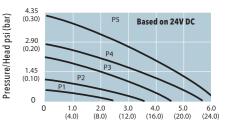
### **FEATURES**

- Up to 5.5 GPM (21 LPM) @ 1.5 psi (0.1 bar)
- Variable flow 5 speed control
- Ignition protected
- Meets EMC requirements
- Connections for 1/2" BSP (13mm)
- Continuously rated
- Pumps water at 176°F (80°C)
- Handles aggressive liquids
- Long-life brushless DC motor

### **PERFORMANCE**



Flow Rate GPM (LPM)



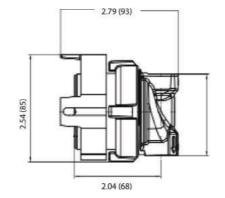
Flow Rate GPM (LPM)

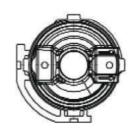
### **MODELS**

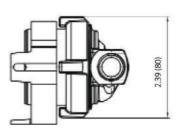
MODEL#	CERTIFICATION	VOLTAGE	FUSE SIZE	CURRENT DRAW	CABLE LENGTH	MINIMUM	WIRE SIZE
59520-0000	CE	8-24V DC	2.5A	1.8A	0-27' (0-8m)	0.1in <sup>2</sup> (2.5mm <sup>2</sup> )	AWG 12
59520-0000 CE 8-24	0-241 DC	2.5/	1.07	27-50' (8-15m)	0.16in <sup>2</sup> (4mm <sup>2</sup> )	AWG 10	

### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).







CIRCULATION



### **FLOJET**®

HPR10/15

# Centrifugal Pumps 02

MAG DRIVE

### Commercial Circulation Pump 59530 Series

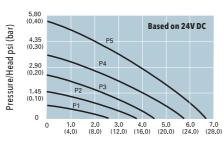




### **FEATURES**

- Up to 5.5 GPM (21 LPM) @ 1.5 psi (0.1 bar)
- Variable flow 5 speed control
- Ignition protected
- Meets EMC requirements
- Connections for 3/4" (19mm)
- Long-life brushless DC motor

### **PERFORMANCE**

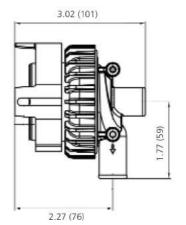


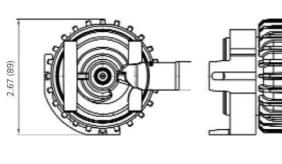
### **MODELS**

MODEL#	CERTIFICATION	VOLTAGE	FUSE SIZE	CURRENT DRAW	CABLE LENGTH	MINIMUM	WIRE SIZE
59530-0000	CE	8-24V DC	2.5A	1.8A	0-27'(0-8m) 27-50'(8-15m)	0.1in² (2.5mm²) 0.16in² (4mm²)	AWG 12 AWG 10

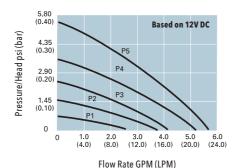
### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).





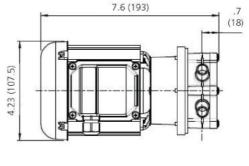
- bore hose
- Continuously rated
- Pumps water at 176°F (80°C)

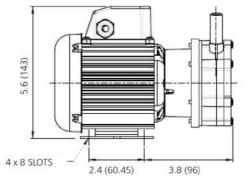


Flow Rate GPM (LPM)

### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



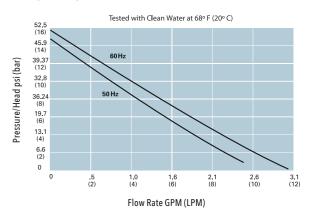


### Designed for continuous recirculation of carbonated water, aggressive chemicals, chilled water, pure or precious liquids in high pressure systems.

### **FEATURES**

- Manufactured in chemically resistant thermoplastics
- Operating at an optimum flow rate of 1.3 GPM (5 LPM)
- Magnetic coupling provides an energyefficient thermal shield, minimizing heat transfer to pumped fluid
- Temperature stability and product purity ensured
- Leak-free continuous operation
- IPX5 motor enclosure
- Low condensation
- Zero maintenance
- Long life
- UL certified models

### PERFORMANCE



### **SPECIFICATIONS**

PUMP DESIGN	Magnetically coupled regenerative pump
FLOW RATE (RUNOUT)	50Hz – 2.7 GPM (10.1 LPM) 60Hz – 3 GPM (11.4 LPM)
BODY PRESSURE	87 psi (6 bar) max
CLOSED VALVE HEAD	50Hz – 48' (14.6m) 60Hz – 52' (15.8m)
MOTORS	110V AC; 230V AC
MOTOR OUTPUT	60 watts
PORTS	1/2" (13mm) BSP, plain 0.6" (15mm)
MAX SPECIFIC GRAVITY*	1
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)
DIMENSIONS	5.6" high x 7.6" long x 3.5" wide (143mm x 193mm x 90mm)
WEIGHT	6.8lb (3.1kg)

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

**FLOJET®** 

MAG DRIVE

### NEMP20/12





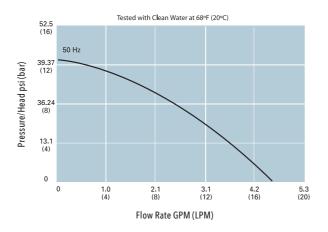




For applications requiring safe, leak-free, high head, continuous flow of aggressive chemicals, acids, alkalis, solvents, pure and chilled fluids.

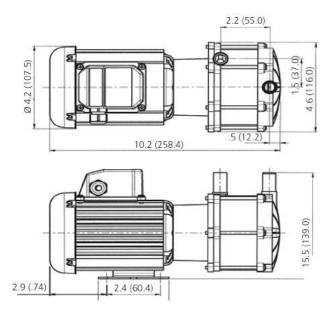
- Manufactured in chemical resistant thermoplastics – entirely non-metallic
- Multistage versions developed for high head with low flow
- Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to the pumped fluid
- IPX5 standard motor housing
- Deep groove ball bearings
- Variable pump body orientation and mounting foot positions
- UL certified models

### **PERFORMANCE**



### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



### **SPECIFICATIONS**

PUMP DESIGN	Multistage magnetically coupled centrifugal pump
FLOW RATE (RUNOUT)	4.6 GPM (17.4 LPM)
BODY PRESSURE	36.3 psi (2.5 bar) max
CLOSED VALVE HEAD	41.6' (12.7m)
MOTORS	100-110V AC, 1Ph, 50/60Hz; 230V AC, 1Ph, 50/60Hz
MOTOR OUTPUT	60 watts
PORTS	3/8" (10mm) BSP, plain 0.6" (15mm), 3/4" (19mm) hose barb
MAX SPECIFIC GRAVITY*	1.2
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)
DIMENSIONS	5.6" high x 8.5" long x 4.9" wide (143mm x 218mm x 116mm)
WEIGHT	6.6lb (3.0kg)

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

Contact factory for custom models.

### NEMP20/18







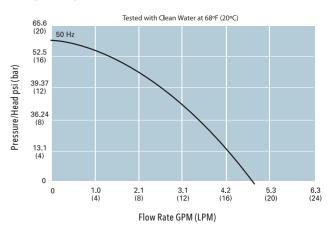
of aggressive chemicals, acids, alkalis, solvents, pure and chilled fluids.

For applications requiring safe, leak-free, high head, continuous flow

### **FEATURES**

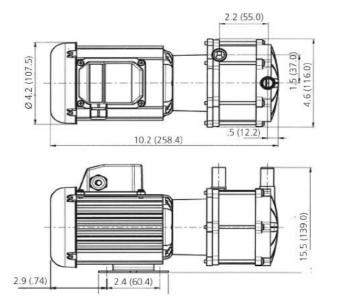
- Manufactured in chemical resistant thermoplastics – entirely non-metallic
- Multistage versions developed for high head with low flow
- · Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to the pumped fluid
- IPX5 standard motor housing
- Deep groove ball bearings
- Variable pump body orientation and mounting foot positions
- UL certified models

### **PERFORMANCE**



### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



### **SPECIFICATIONS**

PUMP DESIGN	Multistage magnetically coupled centrifugal pump
FLOW RATE (RUNOUT)	4.9 GPM (18.5 LPM)
BODY PRESSURE	36.3 psi (2.5 bar) max
CLOSED VALVE HEAD	59' (18m)
MOTORS	110V AC, 1Ph, 50Hz; 230V AC, 1Ph, 50/60Hz
MOTOR OUTPUT	90 watts
PORTS	3/8" (10mm) BSP, plain 0.6" (15mm), 3/4" (19mm) hose barb, 3/8" (10mm) NPT
MAX SPECIFIC GRAVITY*	1.2
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)
DIMENSIONS	5.5" high x 10.2" long x 4.6" wide (139mm x 259mm x 116mm)
WEIGHT	8.4lb (3.8kg)

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

**FLOJET®** 

MAG DRIVE

### **NEMP25/5**







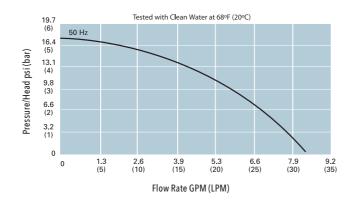


For applications requiring safe, leak-free, continuous flow of aggressive chemicals, acids, alkalis, sterile and chilled fluids.

### **FEATURES**

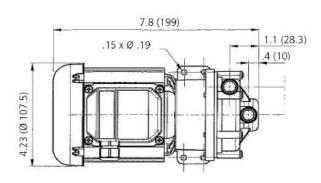
- Manufactured in chemical resistant thermoplastics - entirely non-metallic
- Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to the pumped fluid
- IPX5 standard motor housing
- Deep groove ball bearings

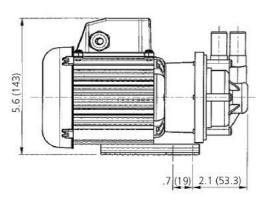
### **PERFORMANCE**



### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).





### **SPECIFICATIONS**

PUMP DESIGN	Magnetically coupled centrifugal pump
FLOW RATE (RUNOUT)	8.5 GPM (32 LPM)
BODY PRESSURE	20.3 psi (1.4 bar) max
CLOSED VALVE HEAD	17.4' (5.3m)
MOTORS	110V AC, 1Ph, 50Hz; 230V AC, 1Ph, 50/60Hz
MOTOR OUTPUT	35 watts
PORTS	Plain 0.6" (15mm), 3/4" (19mm) hose barb, 3/8" (10mm) BSP, 3/8" (10mm) NPT
MAX SPECIFIC GRAVITY*	1.2
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)
DIMENSIONS	5.6" high x 7.8" long x 4" wide (143mm x 199mm x 102mm)
WEIGHT	5.3lb (2.4kg)

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

Contact factory for custom models.

### NEMP40/4









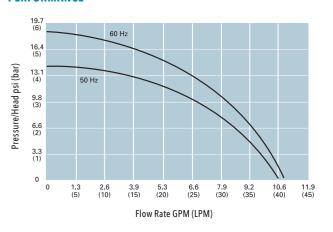
### **FEATURES**

• Manufactured in chemical resistant thermoplastics – entirely non-metallic

chemicals, acids, alkalis, sterile and chilled fluids.

- Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to the pumped fluid
- IP54 standard motor housing. IP55 version available.
- Deep groove ball bearings
- UL certified models

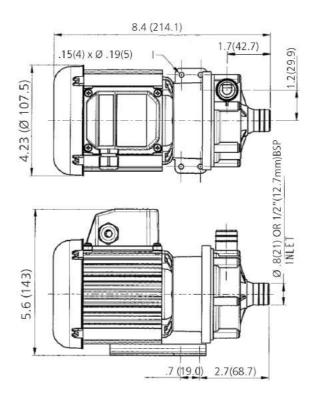
### **PERFORMANCE**



For applications requiring safe, leak-free, continuous flow of aggressive

### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



### **SPECIFICATIONS**

PUMP DESIGN	Magnetically coupled centrifugal pump
FLOW RATE (RUNOUT)	50Hz – 10.6 GPM (40 LPM) 60Hz – 10.8 GPM (41 LPM)
BODY PRESSURE	20.3 psi (1.4 bar) max
CLOSED VALVE HEAD	50Hz – 14.4' (4.4m) 60Hz – 18.7' (5.7m)
MOTORS	110V AC, 1Ph, 50Hz; 230V AC, 1Ph, 50/60Hz
MOTOR OUTPUT	30 watts
PORTS	1/2" (13mm) NPT, plain 0.8" (21mm), 1/2" (13mm) BSP
MAX SPECIFIC GRAVITY*	1.2
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)
DIMENSIONS	5.6" high x 8.4" long x 4" wide (143mm x 214mm x 102mm)
WEIGHT	5.9lb (2.7kg)

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

**FLOJET®** 

MAG DRIVE

### **NEMP40/6**







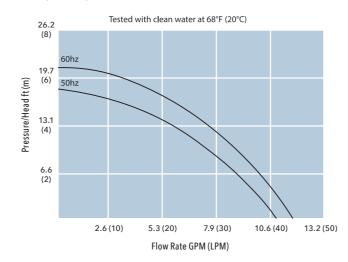


For applications requiring safe, leak-free, continuous flow of aggressive chemicals, acids, alkalis, sterile and chilled fluids.

### **FEATURES**

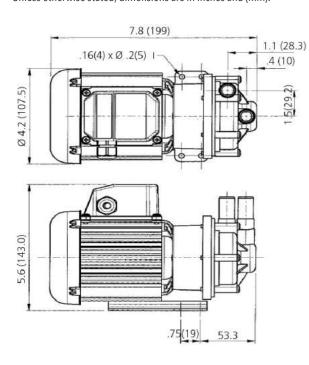
- Manufactured in chemical resistant thermoplastics – entirely non-metallic
- Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to the pumped fluid
- IPX5 standard motor housing. IP55 version available.
- Deep groove ball bearings

### **PERFORMANCE**



### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



### **SPECIFICATIONS**

PUMP DESIGN	Magnetically coupled centrifugal pump		
FLOW RATE (RUNOUT)	50Hz – 10.6 GPM (40 LPM) 60Hz – 11.4 GPM (43 LPM)		
BODY PRESSURE	20.3 psi (1.4 bar) max		
CLOSED VALVE HEAD 50Hz - 18.4' (5.6m) 60Hz - 21.3' (6.5m)			
MOTORS	110V AC, 1Ph, 50/60Hz; 230V AC, 1Ph, 50/60Hz		
MOTOR OUTPUT	60 watts		
PORTS	3/4" (19mm) hose barb, 3/8" (10mm) NPT, plain 0.6" (15mm), 3/8" (10mm) BSP		
MAX SPECIFIC GRAVITY*	1.2		
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)		
DIMENSIONS	5.6" high x 7.9" long x 4" wide (143mm x 200mm x 102mm)		
WEIGHT	6.6lb (3.0kg)		

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

Contact factory for custom models.

### **NEMP50/7**







• Manufactured in chemical resistant thermoplastics - entirely non-metallic • Magnetic couplings provide an energy-

chemicals, acids, alkalis, sterile and chilled fluids.

For applications requiring safe, leak-free, continuous flow of aggressive

efficient thermal shield, minimizing heat transfer to the pumped fluid

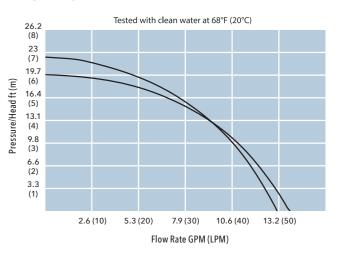
IPX5 standard motor housing

Deep groove ball bearings

UL certified models

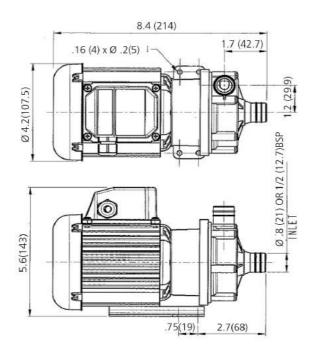
### **PERFORMANCE**

**FEATURES** 



### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



### **SPECIFICATIONS**

PUMP DESIGN Magnetically coupled centrifugal pump  5.0Hz = 13.2 GPM (5.0 LPM)		
50Hz = 13 2 GPM (50 LPM)		
FLOW RATE (RUNOUT) 50 Hz - 13.2 GPM (50 LPM) 60 Hz - 13.7 GPM (52 LPM)		
BODY PRESSURE 20.3 psi (1.4 bar) max		
CLOSED VALVE HEAD 50 Hz - 19.7' (6m) 60 Hz - 22.3' (6.8m)		
MOTORS 110V AC, 1Ph, 50/60Hz; 230V AC, 1Ph, 50/60H	Hz	
MOTOR OUTPUT 60 watts		
1/2" (13mm) BSP, plain 0.8" (21mm), 1" (25mm hose barb, 1/2" (13mm) NPT	n)	
MAX SPECIFIC GRAVITY* 1.2		
TEMPERATURE RANGE -4°F to +185°F (-20°C to +85°C)		
5.6" high x 8.4" long x 4" wide (143mm x 214mm x 102mm)		
<b>WEIGHT</b> 6.8lb (3.1kg)		

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

MAG DRIVE

### **FLOJET®**

• Magnetic couplings provide an energy-

efficient thermal shield, minimizing

heat transfer to the pumped fluid

• IP54 standard motor housing.

IP55 version available.

Deep groove ball bearings

### NEMP50/11





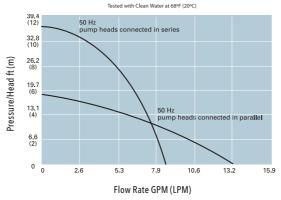




simultaneously

**PERFORMANCE** 

**FEATURES** 



For applications requiring safe, leak-free, continuous flow of aggressive

chemicals, acids, alkalis, sterile and chilled fluids.

Manufactured in chemical resistant

thermoplastics – entirely non-metallic

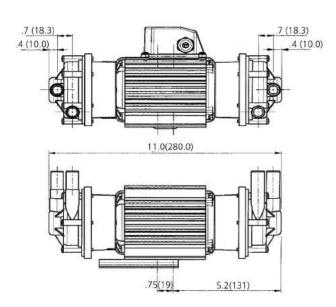
• Pump head can be connected in series

for high head applications

• Can pump two dissimilar fluids

### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



### **MODELS**

MODEL#	CERTIFICATION	VOLTAGE	PORT DETAILS
406946	CE	230V, 1Ph, 50Hz	3/8" (10mm) BSP male
456903	CE	230V, 1Ph, 50Hz	Plain 0.6" (15mm)

Contact factory for custom models.

### **SPECIFICATIONS**

PUMP DESIGN	Double-ended magnetically coupled centrifugal pump		
FLOW RATE (RUNOUT)	13.2 GPM (50 LPM)		
BODY PRESSURE	20.3 psi (1.4 bar) max		
CLOSED VALVE HEAD	36.1' (11m)		
MOTOR OUTPUT	90 watts		
MAX SPECIFIC GRAVITY*	1.2		
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)		
DIMENSIONS	5.1" high x 11" long x 5.2" wide (130mm x 280mm x 132mm)		
WEIGHT	8.4lb (3.8kg)		

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

### NEMP50/25









### **FEATURES**

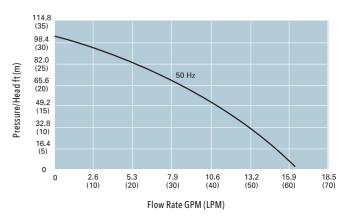
• Manufactured in chemical resistant thermoplastics - entirely non-metallic

chemicals, acids, alkalis, sterile and chilled fluids.

For applications requiring safe, leak-free, continuous flow of aggressive

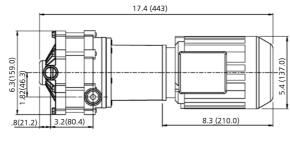
- Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to the pumped fluids
- Variable pump body orientation
- Compatible with standard pushfit
- IP55 standard motor housing

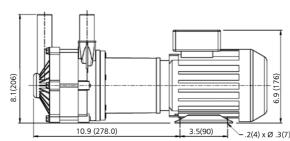
### **PERFORMANCE**



### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).





### **MODELS**

MODEL#	CERTIFICATION	VOLTAGE	PORT DETAILS
048937	CE	230V, 1Ph, 50Hz	Plain 1.1" (28mm)

Contact factory for custom models.

PUMP DESIGN	Multistage magnetically coupled centrifugal pump		
FLOW RATE (RUNOUT)	16.2 GPM (61.5 LPM)		
BODY PRESSURE	29 psi (2 bar) max		
CLOSED VALVE HEAD	103.3' (31.5m)		
MOTOR OUTPUT	550 watts		
MAX SPECIFIC GRAVITY*	1		
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)		
DIMENSIONS	8.1" high x 17.4" long x 6.3" wide (206mm x 443mm x 159mm)		
WEIGHT	8.4lb (10.1kg)		

<sup>\*</sup>Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

MAG DRIVE



### **NEMP60/6**







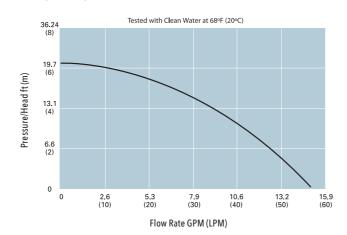


For applications requiring safe, leak-free, continuous flow of aggressive chemicals, acids, alkalis, sterile and chilled fluids.

### **FEATURES**

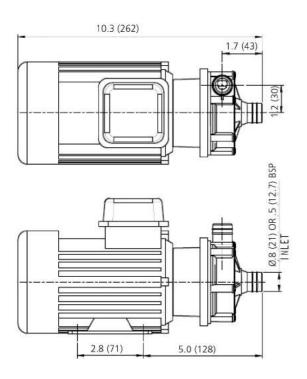
- Manufactured in chemical resistant thermoplastics – entirely non-metallic
- Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to the pumped fluid
- IP55 motor standard

### **PERFORMANCE**



### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



### **MODELS**

MODEL#	CERTIFICATION	VOLTAGE	PORT DETAILS
018923	CE	400V, 3Ph, 50Hz	Plain 0.8" (21mm)
018924	CE	400V, 3Ph, 50Hz	1/2" (13mm) BSP male

Contact factory for custom models.

### **SPECIFICATIONS**

PUMP DESIGN Magnetically coupled centrifugal pump  FLOW RATE (RUNOUT) 15.1 GPM (57 LPM)  BODY PRESSURE 20.3 psi (1.4 bar) max  CLOSED VALVE HEAD 20.3' (6.2m)
BODY PRESSURE 20.3 psi (1.4 bar) max
CLOSED VALVE HEAD 20.31 (6.2m)
20.3 (0.2111)
MOTOR OUTPUT 90 watts
MAX SPECIFIC GRAVITY* 1.2
TEMPERATURE RANGE -4°F to +185°F (-20°C to +85°C)
5.7" high x 10.3" long x 4.3" wide (146mm x 262mm x 108mm)
<b>WEIGHT</b> 8.8lb (4.0kg)

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

### **NEMP80/6**







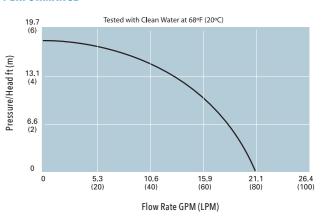


For applications requiring safe, leak-free, continuous flow of aggressive chemicals, acids, alkalis, sterile and chilled fluids.

### **FEATURES**

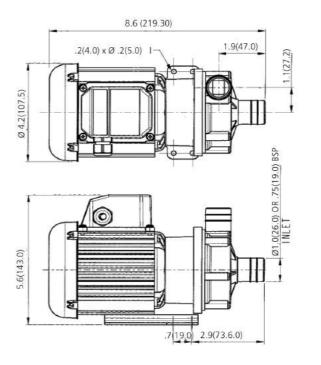
- Manufactured in chemical resistant thermoplastics – entirely non-metallic
- Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to the pumped fluid
- IPX5 standard motor housing
- Deep groove ball bearings
- UL certified models

### **PERFORMANCE**



### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



### **SPECIFICATIONS**

PUMP DESIGN	Magnetically coupled centrifugal pump		
FLOW RATE (RUNOUT)	21.1 GPM (80 LPM)		
BODY PRESSURE	20.3 psi (1.4 bar) max		
CLOSED VALVE HEAD	18' (5.5m)		
MOTORS	110V AC, 1Ph, 50/60Hz; 230V AC, 1Ph, 50/60Hz		
MOTOR OUTPUT	60 watts		
PORTS	Plain 1" (25mm), 3/4" (19mm) BSP, 3/4" (19mm) NPT		
MAX SPECIFIC GRAVITY*	1.2		
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)		
DIMENSIONS	5.6" high x 8.7" long x 4" wide (143mm x 220mm x 102mm)		
WEIGHT	6.8lb (3.1kg)		

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

MAG DRIVE



### NEMP100/6



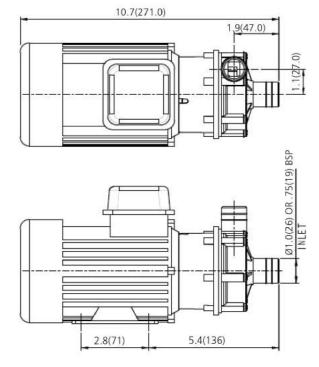






### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).

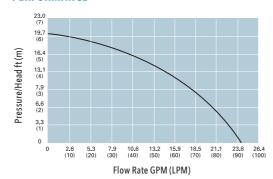


For heavy duty applications requiring safe, leak-free, continuous flow of aggressive chemicals, acids, solvents, alkalis, sterile and chilled fluids.

### **FEATURES**

- Manufactured in chemical resistant thermoplastics – entirely non-metallic
- Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to the pumped fluids
- IP55 standard motor housing

### **PERFORMANCE**



### **MODELS**

MODEL#	CERTIFICATION	VOLTAGE	PORT DETAILS
028905	CE	400V, 3Ph, 50Hz	Plain 0.8" (21mm)
038925	CE	400V, 3Ph, 50Hz	3/4" (19mm) BSP male

Contact factory for custom models.

### **SPECIFICATIONS**

PUMP DESIGN	Magnetically coupled centrifugal pump		
FLOW RATE (RUNOUT)	15.1 GPM (100 LPM)		
BODY PRESSURE	20.3 psi (1.4 bar) max		
CLOSED VALVE HEAD	18.7' (5.7m)		
MOTOR OUTPUT	90 watts		
MAX SPECIFIC GRAVITY*	1.05		
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)		
5.7" high x 10.7" long x 4.3" wide (146mm x 271mm x 108mm)			
WEIGHT	7.9lb (3.6kg)		

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

### NEMP120/8



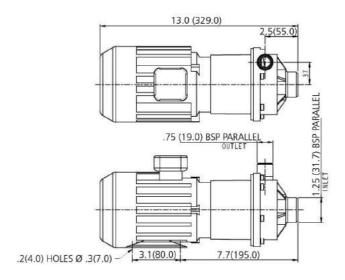






### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).

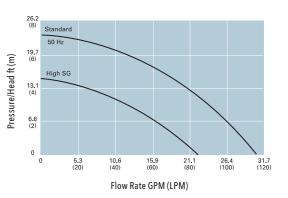


For heavy duty applications requiring safe, leak-free, continuous flow of aggressive chemicals, acids, solvents, alkalis, sterile and chilled fluids.

### **FEATURES**

- Manufactured in chemical resistant thermoplastics – entirely non-metallic
- Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to the pumped fluids
- IP55 standard motor housing
- High SG versions available

### **PERFORMANCE**



### **MODELS**

MODEL#	CERTIFICATION	VOLTAGE	PORT DETAILS
028907	CE	230V, 1Ph, 50Hz	1-1/4" (32mm) BSP male (inlet) 3/4" (19mm) BSP male (outlet)
028908	CE	400V, 3Ph, 50Hz	1-1/4" (32mm) BSP male (inlet) 3/4" (19mm) BSP male (outlet)
028939	CE	110V, 1Ph, 60Hz	1-1/4" (32mm) BSP male (inlet) 3/4" (19mm) BSP male (outlet)

Contact factory for custom models.

PUMP DESIGN	Magnetically coupled centrifugal pump		
FLOW RATE (RUNOUT)	30.9 GPM (117 LPM)		
BODY PRESSURE	24.7 psi (1.7 bar) max		
CLOSED VALVE HEAD	26.3' (7.2m)		
MOTOR OUTPUT	180 watts (1Ph), 250 watts (3Ph)		
MAX SPECIFIC GRAVITY*	1.2		
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)		
DIMENSIONS	5.6" high x 13" long x 4.7" wide (141mm x 329mm x 119mm)		
WEIGHT	12lb (5.5kg)		

<sup>\*</sup>Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

MAG DRIVE



### NEMP160/9



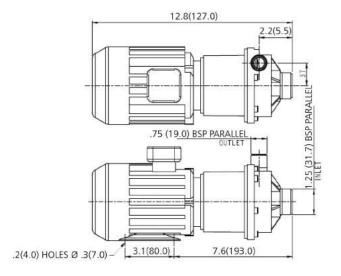






### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).

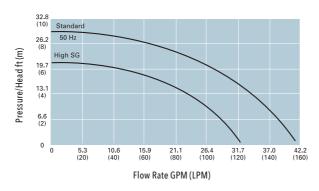


For heavy duty applications requiring safe, leak-free, continuous flow of aggressive chemicals, acids, solvents, alkalis, sterile and chilled fluids.

### **FEATURES**

- Manufactured in chemical resistant thermoplastics - entirely non-metallic
- Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to the pumped fluids
- IP55 standard motor housing
- High SG version available
- PVDF versions available

### PERFORMANCE



### **MODELS**

MODEL#	CERTIFICATION	VOLTAGE	PORT DETAILS
028911	CE	230V, 1Ph, 50Hz	1-1/4" (32mm) BSP male (inlet) 3/4" (19mm) BSP male (outlet)
028912	CE	400V, 3Ph, 50Hz	1-1/4" (32mm) BSP male (inlet) 3/4" (19mm) BSP male (outlet)
028941	CE	110V, 1Ph, 60Hz	1-1/4" (32mm) BSP male (inlet) 3/4" (19mm) BSP male (outlet)

Contact factory for custom models.

### **SPECIFICATIONS**

PUMP DESIGN	Magnetically coupled centrifugal pump		
FLOW RATE (RUNOUT)	41.7 GPM (158 LPM)		
BODY PRESSURE	24.7 psi (1.7 bar) max		
CLOSED VALVE HEAD	28.9' (8.8m)		
MOTOR OUTPUT	180 watts (1Ph), 250 watts (3Ph)		
MAX SPECIFIC GRAVITY*	1.2		
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)		
DIMENSIONS	5.6" high x 12.9" long x 4.7" wide (141mm x 327mm x 119mm)		
WEIGHT	12.3lb (5.6kg)		

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

### NEMP200/12



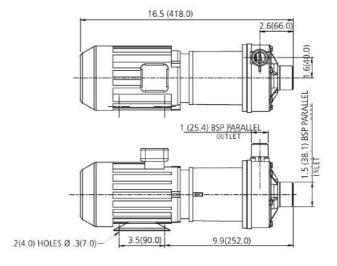






### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).

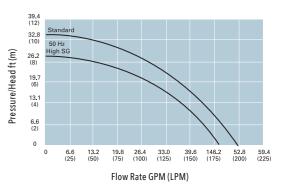


For heavy duty applications requiring safe, leak-free, continuous flow of aggressive chemicals, acids, solvents, alkalis, sterile and chilled fluids.

### **FEATURES**

- Manufactured in chemical resistant thermoplastics – entirely non-metallic
- Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to the pumped fluids
- IP55 standard motor housing
- High SG version available
- PVDF versions available

### **PERFORMANCE**



### **MODELS**

MODEL#	CERTIFICATION	VOLTAGE	PORT DETAILS
028915	CE	230V, 1Ph, 50Hz	1-1/2" (38mm) BSP male (inlet) 1" (25mm) BSP male (outlet)
028916	CE	400V, 3Ph, 50Hz	1-1/2" (38mm) BSP male (inlet) 1" (25mm) BSP male (outlet)
028943	CE	110V, 1Ph, 60Hz	1-1/2" (38mm) BSP male (inlet) 1" (25mm) BSP male (outlet)

Contact factory for custom models.

Magnetically coupled centrifugal pump		
52.8 GPM (200 LPM)		
29 psi (2 bar) max		
34.4' (10.5m)		
550 watts		
1.2		
-4°F to +185°F (-20°C to +85°C)		
6.7" high x 16.5" long x 4.9" wide (171mm x 418mm x 125mm)		
21.2lb (9.6kg)		

<sup>\*</sup>Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

MAG DRIVE

### **FLOJET®**

### NEMP300/20







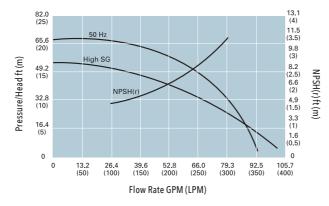


For heavy duty applications requiring safe, leak-free, continuous flow of aggressive chemicals, acids, solvents, alkalis, sterile and chilled fluids.

### **FEATURES**

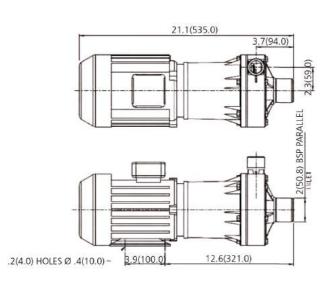
- Manufactured in chemical resistant thermoplastics – entirely non-metallic
- Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to the pumped fluids
- IP55 standard motor housing
- High SG version available
- PVDF versions available

### **PERFORMANCE**



### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



### **MODELS**

MODEL#	CERTIFICATION	VOLTAGE	PORT DETAILS
028919	CE	230V, 1Ph, 50Hz	2" (51mm) BSP male (inlet) 1-1/4" (32mm) BSP male (outlet)
028920	CE	400V, 3Ph, 50Hz	2" (51mm) BSP male (inlet) 1-1/4" (32mm) BSP male (outlet)
028945	CE	110V, 1Ph, 60Hz	2" (51mm) BSP male (inlet) 1-1/4" (32mm) BSP male (outlet)

Contact factory for custom models.

### **SPECIFICATIONS**

PUMP DESIGN	Magnetically coupled centrifugal pump		
FLOW RATE (RUNOUT)	92.5 GPM (350 LPM)		
BODY PRESSURE	43.5 psi (3 bar) max		
CLOSED VALVE HEAD	68.9' (21m)		
MOTOR OUTPUT	1500 watts		
MAX SPECIFIC GRAVITY*	1.2		
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)		
DIMENSIONS	8.7" high x 21.1" long x 6.9" wide (222mm x 535mm x 174mm)		
WEIGHT	39.7lb (18kg)		

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

### NEMP500/20





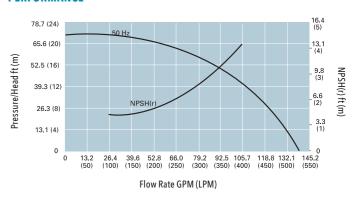


For heavy duty applications requiring safe, leak-free, continuous flow of aggressive chemicals, acids, solvents, alkalis, sterile and chilled fluids.

### **FEATURES**

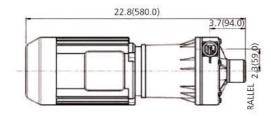
- Manufactured in chemical resistant thermoplastics – entirely non-metallic
- Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to the pumped fluids
- IP55 standard motor housing
- High SG version built to order
- PVDF versions available

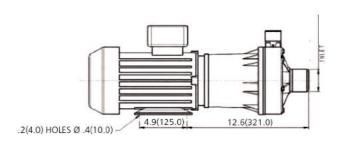
### **PERFORMANCE**



### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).





### **MODELS**

MODEL#	CERTIFICATION	VOLTAGE	PORT DETAILS
028995	CE	400V, 3Ph, 50Hz	2" (51mm) BSP male (inlet) 1-1/4" (32mm) BSP male (outlet)
048941	CE	110V, 1Ph, 50Hz	2" (51mm) BSP male (inlet) 1-1/4" (32mm) BSP male (outlet)

Contact factory for custom models.

PUMP DESIGN	Magnetically coupled centrifugal pump		
FLOW RATE (RUNOUT)	138.7 GPM (525 LPM)		
BODY PRESSURE	43.5 psi (3 bar) max		
CLOSED VALVE HEAD	71.2' (21.7m)		
MOTOR OUTPUT	2.2 kW (standard) 3.0 kW (high SG)		
MAX SPECIFIC GRAVITY*	1.2		
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)		
DIMENSIONS	9.3" high x 22.8" long x 6.9" wide (235mm x 580mm x 175mm)		
WEIGHT	45.4lb (20.6kg)		

<sup>\*</sup>Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

MAG DRIVE

### **FLOJET®**

### NEMP800/30





**DIMENSIONAL DRAWINGS** 

INLET 3.0(75.0) LOOSE FLANGE-BS10/BS4504/ASA150

OUTLET 2.5(63.0) LOOSE FLANGE BS10/BS4504/ASA150

Unless otherwise stated, dimensions are in inches and (mm).

24.2(615.0) (VEM 22.6(575.0)) 13.4(340.0) (VEM 11.8(300.0))

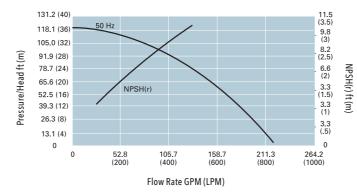




For heavy duty applications requiring safe, leak-free, continuous flow of aggressive chemicals, acids, solvents, alkalis, sterile and chilled fluids.

- · Manufactured in chemical resistant thermoplastics – entirely non-metallic
- · Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to the pumped fluids
- IP55 standard motor housing
- High SG version built to order
- PVDF versions available

### **PERFORMANCE**

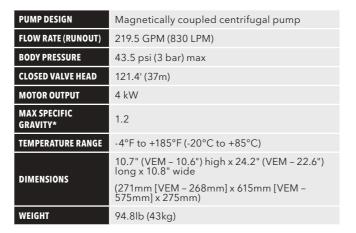


### **MODELS**

MODEL#	CERTIFICATION	VOLTAGE	PORT DETAILS
048911	CE	400V, 3Ph, 50Hz	3.0" (75mm) flange (inlet)
040711	CL		2.5" (63mm) flange (outlet)

Contact factory for custom models.

### **SPECIFICATIONS**



<sup>\*</sup>Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

### NDP14/2









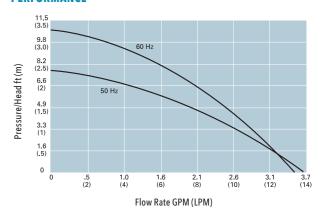
### **FEATURES**

 Manufactured in chemical resistant thermoplastics – entirely non-metallic

processing equipment, particularly where space is limited.

- Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to pumped fluids
- Leak free continuous operation
- Drip-proof IP22 motor housing
- Low maintenance

### **PERFORMANCE**

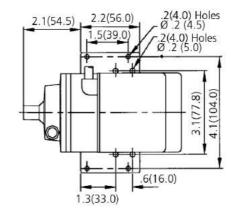


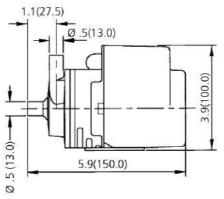
For continuous transfer/recirculation of aggressive chemicals, chilled water,

pure or precious liquids, in photographic, reprographic, X-ray and industrial

### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).





### **SPECIFICATIONS**

PUMP DESIGN	Magnetically coupled centrifugal pump		
FLOW RATE (RUNOUT)	50Hz – 3.65 GPM (13.8 LPM) 60Hz – 3.57 GPM (13.5 LPM)		
BODY PRESSURE	20.3 psi (1.4 bar) max		
CLOSED VALVE HEAD	50Hz – 7.5' (2.3m) 60Hz – 10.8' (3.3m)		
MOTORS	110V AC, 1Ph, 50/60Hz; 230V AC, 1Ph, 50/60Hz		
MOTOR OUTPUT	10 watts		
PORTS	Plain 1/2" (13mm), 1/4" (6mm) BSP		
MAX SPECIFIC GRAVITY*	1.2		
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)		
DIMENSIONS	3.9" high x 5.9" long x 4.4" wide (100mm x 150mm x 112mm)		
WEIGHT	3.7lb (1.7kg)		

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

**FLOJET®** 

MAG DRIVE

### NDP25/2







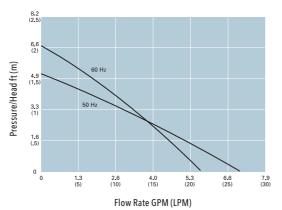


For continuous transfer/recirculation of aggressive chemicals, chilled water, pure or precious liquids, in photographic, reprographic, X-ray and industrial processing equipment, particularly where space is limited.

### **FEATURES**

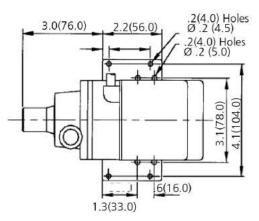
- Manufactured in chemical resistant thermoplastics - entirely non-metallic
- · Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to pumped fluids
- Leak free continuous operation
- Drip-proof IP22 motor housing
- Low maintenance

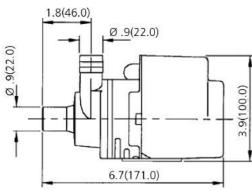
### **PERFORMANCE**



### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).





### **MODELS**

MODEL#	CERTIFICATION	VOLTAGE	PORT DETAILS
123927	CE	230V, 1Ph, 50Hz	Plain 0.9" (22mm)
133923	CE	230V, 1Ph, 50Hz	1/2" (13mm) BSP

Contact factory for custom models.

### **SPECIFICATIONS**

PUMP DESIGN	Magnetically coupled centrifugal pump	
FLOW RATE (RUNOUT)	50Hz - 7.1 GPM (27 LPM)	
FLOW RAIE (RUNGUI)	60Hz - 5.5 GPM (21 LPM)	
BODY PRESSURE	20.3 psi (1.4 bar) max	
CLOSED VALVE HEAD	50Hz - 5.2' (1.6m)	
CLUSED VALVE HEAD	60Hz - 6.9' (2.1m)	
MOTOR OUTPUT	TPUT 10 watts	
MAX SPECIFIC GRAVITY*	1.2	
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)	
DIMENSIONS	3.9" high x 6.7" long x 4.4" wide	
DIMENSIONS	(100mm x 171mm x 112mm)	
WEIGHT	4lb (1.8kg)	
	-	

<sup>\*</sup>Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

### NDP25/4





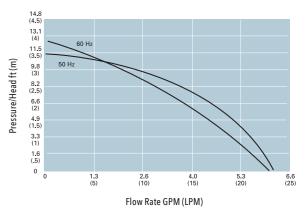




### **FEATURES**

- Manufactured in chemical resistant thermoplastics - entirely non-metallic
- Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to pumped fluids
- Leak free continuous operation
- Drip-proof IP22 motor housing
- Low maintenance
- UL certified models

### **PERFORMANCE**



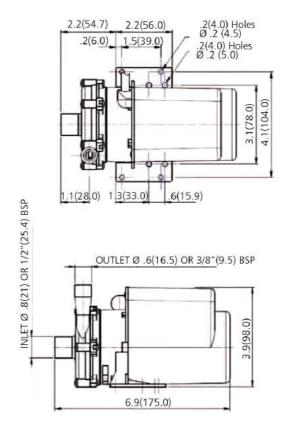
For continuous transfer/recirculation of aggressive chemicals, chilled water,

pure or precious liquids, in photographic, reprographic, X-ray and industrial

processing equipment, particularly where space is limited.

### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



### **SPECIFICATIONS**

PUMP DESIGN	Magnetically coupled centrifugal pump
FLOW RATE (RUNOUT)	50Hz – 5.9 GPM (22.5 LPM) 60Hz – 6.1 GPM (23 LPM)
BODY PRESSURE	29 psi (2 bar) max
CLOSED VALVE HEAD	50Hz – 11.5' (3.5m) 60Hz – 12.5' (3.8m)
MOTORS	110V AC, 1Ph, 60Hz; 230V AC, 1Ph, 50/60Hz
MOTOR OUTPUT	18 watts
PORTS	Plain 0.8" (21mm) inlet, 0.6" (15mm) outlet; 1/2" (13mm) BSP inlet, 3/8" (10mm) BSP outlet; 1/2" (13mm) NPT inlet, 3/4" (19mm) NPT outlet
MAX SPECIFIC GRAVITY*	1
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)
DIMENSIONS	4" high x 7.3" long x 4.4" wide (101mm x 185mm x 112mm)
WEIGHT	4.6lb (2.1kg)

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

**FLOJET®** 

MAG DRIVE

### NDP35/3







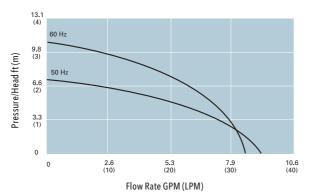


For continuous transfer/recirculation of aggressive chemicals, chilled water, pure or precious liquids, in photographic, reprographic, X-ray and industrial processing equipment, particularly where space is limited.

### **FEATURES**

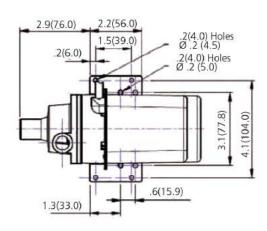
- Manufactured in chemical resistant thermoplastics - entirely non-metallic
- · Magnetic couplings provide an energyefficient thermal shield, minimizing heat transfer to pumped fluids
- Leak free continuous operation
- Drip-proof IP22 motor housing
- Low maintenance

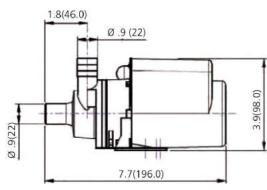
### **PERFORMANCE**



### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).





### **SPECIFICATIONS**

PUMP DESIGN	Magnetically coupled centrifugal pump			
FLOW RATE (RUNOUT)	50Hz - 9.2 GPM (35 LPM)			
FLOW RAIE (RUNOUI)	60Hz - 8.7 GPM (33 LPM)			
BODY PRESSURE 20.3 psi (1.4 bar) max				
CLOCED VALVE HEAD	50Hz - 7.2' (2.2m)			
CLOSED VALVE HEAD	60Hz - 10.8' (3.3m)			
MOTORS	110V AC, 1Ph, 50/60Hz; 230V AC, 1Ph, 50/60Hz			
MOTOR OUTPUT	18 watts			
PORTS Plain 0.8" (21mm) 1/2" (13mm) NPT				
MAX SPECIFIC GRAVITY*	1			
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)			
	3.9" high x 7.7" long x 4.4" wide			
DIMENSIONS	(98mm x 196mm x 112.5mm)			
WEIGHT	5.1lb (2.3kg)			

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

Contact factory for custom models.

### DC15/5









# **FEATURES**

- Magnetically coupled, sealless leak-free design
- Variable mounting foot positions
- Lifts to 16.4' (5m)

Designed for hot and cold drink vending, water circulation, recirculation and

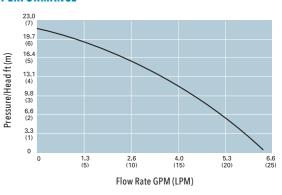
cooling duties in beverage, laboratory, agricultural, print, photographic and

industrial processing applications, and other short-time-rated applications.

12 volt and 24 volt versions to suit vehicular applications.

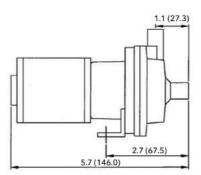
· Pump body orientation easily altered to suit installations

### **PERFORMANCE**

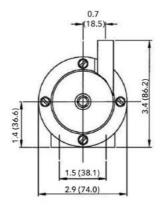


### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



mounting foot fixing holes: M5



### **MODELS**

MODEL#	CERTIFICATION	DESCRIPTION	PORT DETAILS
013950	CE	12V DC	Plain 1/2" (13mm)
033944	CE	24V DC	Plain 1/2" (13mm)

Contact factory for custom models.

### **SPECIFICATIONS**

PUMP DESIGN	Magnetically coupled centrifugal pump
FLOW RATE (RUNOUT)	6.1 GPM (23.0 LPM)
BODY PRESSURE	20.3 psi (1.4 bar) max
CLOSED VALVE HEAD	21.3' (6.5m)
MOTOR OUTPUT	25 watts
MAX SPECIFIC GRAVITY*	1
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)
DIMENSIONS	3.4" high x 5.7" long x 2.9" wide (86mm x 146mm x 74mm)
WEIGHT	1.5lb (0.7kg)

\*Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

MAG DRIVE





# Centrifugal Pumps 02

SUBMERSIBLE

### DC30/5













Designed for hot and cold drink vending, water circulation, recirculation and cooling duties in beverage, laboratory, agricultural, print, photographic and industrial processing applications, and other short-time-rated applications.

12 volt and 24 volt versions to suit vehicular applications.

### **FEATURES**

• Magnetically coupled, sealless leak-free design

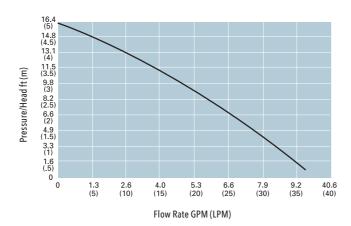
altered to suit installations

• Lifts to 16.4' (5m)

Variable mounting foot positions

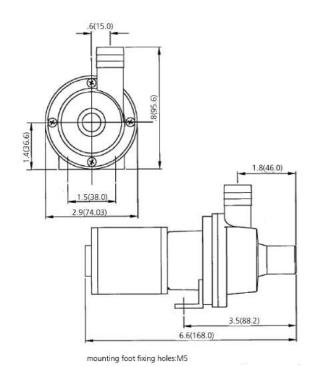
· Pump body orientation easily

### **PERFORMANCE**



### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



### **MODELS**

MODEL#	CERTIFICATION	DESCRIPTION	PORT DETAILS
013948	CE	12V DC	Plain 0.8" (21mm)
033982	CE	24V DC	Plain 0.8" (21mm)

Contact factory for custom models.

### **SPECIFICATIONS**

PUMP DESIGN	Magnetically coupled centrifugal pump			
FLOW RATE (RUNOUT)	9.2 GPM (35 LPM)			
BODY PRESSURE	20.3 psi (1.4 bar) max			
CLOSED VALVE HEAD	16.4' (5.0m)			
MOTOR OUTPUT	25 watts			
MAX SPECIFIC GRAVITY*	1			
TEMPERATURE RANGE	-4°F to +185°F (-20°C to +85°C)			
DIMENSIONS	3.8" high x 6.6" long x 2.9" wide			
DIMENSIONS	(96mm x 168mm x 74mm)			
WEIGHT	1.5lb (0.7kg)			

<sup>\*</sup>Assuming maximum viscosity of 30 cp. Refer to Xylem for higher viscosities and specific gravities.

### Introduction to Rule Submersible Pumps

Rule submersible pumps are unrivaled in their combination of versatility, performance, reliability and value. Their small size enables them to be installed in confined spaces where water needs to be circulated or removed. They are totally sealed so they can be left permanently submerged. The electrical safety of pumps fitted with low voltage DC motors is superior to mains voltage pumps.

- Compact, efficient, long-life motors
- Totally submersible
- Rust and corrosion proof
- Silent and vibration-free operation

### General Purpose Centrifugal Pumps







### **FOR INTERNATIONAL & US MARKETS**

The Rule general purpose pump is designed with a 1-1/2" (38mm) inlet and 1-1/2" (38mm) discharge outlet. The Rule general purpose pump must be mounted below the waterline. It does not deliver high pressure, nor is it selfpriming. It delivers lots of water, but at low pressure. 12 volts DC unless noted.

### **MODELS**

MODEL#	CERTIFICATION	CAPACITY	
17A	CE	3800 GPH (14380 LPH)	
18A	CE	24V – 3700 GPH (14002 LPH)	
19A	CE	32V – 3700 GPH (14002 LPH)	

### 110 Volt Pumps







### **FOR US MARKETS**

Designed to remove water from basements, garages, stairwells, utility rooms, and other utility applications. Available in non-automatic and automatic versions utilizing standard 110 volt AC current. UL listed.

### **MODELS**

AUTOMATIC MODEL#	CERTIFICATION	CAPACITY	CORD	ADAPTERS INCLUDED
A53S	UL	1800 GPH (6814 LPH)	8' (2.4m)	Garden hose and rigid pipe #57
A53S-24	UL	1800 GPH (6814 LPH)	24' (7.3m)	Garden hose and rigid pipe #57

NON- AUTOMATIC MODEL#	CERTIFICATION	CAPACITY	CORD	ADAPTERS INCLUDED
A53D	UL	1800 GPH (6814 LPH)	8' (2.4m)	Garden hose and rigid pipe #57



### Slimline Pumps















### **FOR INTERNATIONAL & US MARKETS**

There are four sizes in the Slimline series, which includes strainers for use in submersible mode or, when the filter is removed, for use in the inline pumping mode. These pumps are capable of pumping hot or cold fresh water, seawater, antifreeze and even diesel. These pumps can be used to pump water from tight spaces, for general wash down, water and diesel transfer, or engine winterizing.

Rule has developed a family of compact combination submersible and inline pumps and portable pump kits designed for a wide variety of uses.

- Delivers up to 425 GPH (1608 LPH)
- Pumps fresh and seawater, diesel
- Continuous duty (not all models)

### **APPLICATIONS**

- Water testing
- Borehole testing
- Agricultural spraying
- General transfer
- Diesel refuelling and transfer
- Garden watering
- Container filling and emptying
- Sink draining Engine winterizing

### **MODELS**

MODEL#	CERTIFICATION	VOLTS	DESCRIPTION	CAPACITY
iL425P	CE	12V	iL425 Plus	425 GPH (1608 LPH)
iL425P-24	CE	24V	iL425 Plus	425 GPH (1608 LPH)
iL280P	CE	12V	iL280 Plus	280 GPH (1059 LPH)
iL280P-24	CE	24V	iL280 Plus	280 GPH (1059 LPH)
iL200P	CE	12V	iL200 Plus	200 GPH (756 LPH)
iL200P-24	CE	24V	iL200 Plus	200 GPH (756 LPH)
iL200*	CE	12V	iL200	200 GPH (756 LPH)

<sup>\*</sup>Not for use with diesel fuel.

### Slimline Pump Kit

















### **FOR INTERNATIONAL & US MARKETS**

The portable pump kits come complete with lay-flat hose and battery terminal clips, and are ready to use!

### **FEATURES**

- Pump
- 10' (3m) wire with battery clamps
- Lay-flat hose
- Spray nozzle

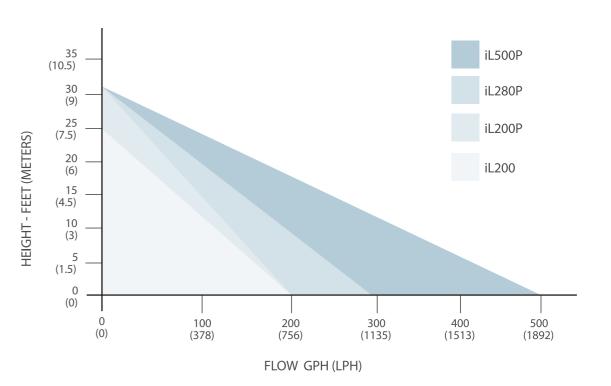
### **APPLICATIONS**

- Water testing
- Borehole testing Agricultural spraying
- General transfer
- Diesel transfer
- Garden watering

### **MODELS**

MODEL#	CERTIFICATION	VOLTS	DESCRIPTION	CAPACITY
iL425PK	CE	12V	iL425 Plus Kit	425 GPH (1608 LPH)
iL425PK-24	CE	24V	iL425 Plus Kit	425 GPH (1608 LPH)
iL280PK	CE	12V	iL280 Plus Kit	280 GPH (1059 LPH)
iL280PK-24	CE	24V	iL280 Plus Kit	280 GPH (1059 LPH)
iL200K*	CE	12V	iL200 Plus Kit	200 GPH (756 LPH)

<sup>\*</sup>Not for use with diesel fuel.







MODEL	IL425PLUS	IL280PLUS	IL200PLUS	IL200				
PUMP TYPE	Centrifugal submersible and inline pump							
CURRENT	12V - 6 amp, 24V - 3 amp	12V - 4.5 amp, 24V - 2.5 amp	12V - 4.5 amp, 24V - 2.5 amp	12V - 2.8 amp				
HEAD	32' (9.7m)	32' (9.7m)	32' (9.7m)	25' (7.6m)				
FLOW RATE	425 GPH (1608 LPH)	280 GPH (1080 LPH)	200 GPH (760 LPH)	200 GPH (760 LPH)				
OUTLETS	3/4" (19mm) ID hose	1/2" (13mm) ID hose	1/2" (13mm) ID hose	3/8" (10mm) and 1/2" (13mm) ID hose				
PRESSURE	14 psi (0.96 bar)	14 psi (0.96 bar)	11 psi (0.76 bar)	14 psi (0.96 bar)				
BODY	Acetal	Acetal	Acetal	Styrene				
LENGTH	6.5" (165mm)	6.5" (165mm)	5.6" (142mm)	5.1" (130mm)				
DIAMETER	1.5" (38mm)	1.5" (38mm)	1.5" (38mm)	1.4" (36mm)				
CABLE LENGTH	13' (4m)	13' (4m)	13' (4m)	3' (1m)				
LIQUID	Fresh and seawater / diesel	Fresh and seawater / diesel	Fresh and seawater / diesel	Fresh and seawater				
OPERATING TEMPERATURE	Water systems to 176°F (80°C)	Water systems to 176°F (80°C)	Water systems to 176°F (80°C)	Water systems to 140°F (60°C)				



INTRODUCTION

### Diaphragm Pump Product Range

### **FEATURES**

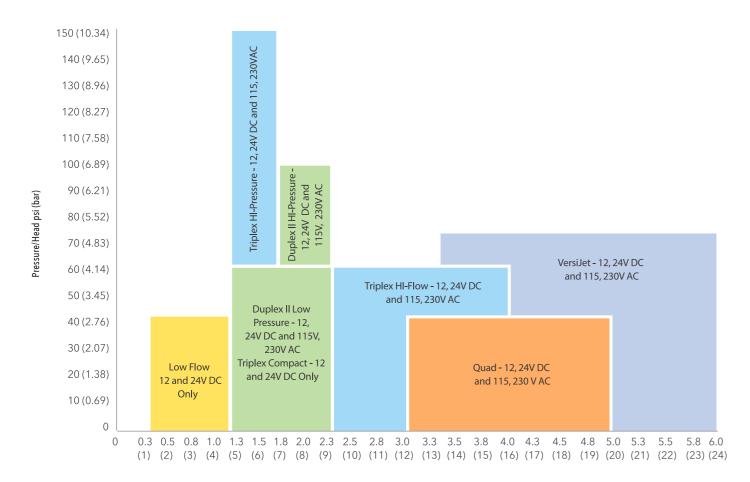
Expect only the best. With over 30 years of pump design and manufacturing experience, Flojet is committed to delivering the hardest-working and longest-lasting pumps. No matter the application, Flojet can provide a superior pump to match all your requirements.

Operational "Box" for Flojet diaphragm pumps (Options below are not available to all ranges.)

PRESSURE	0-150 psi (0-10 bar)
OPEN FLOW	0.3-6 GPM (1.1-22.7 LPM)
ELASTOMERS	EP/PP blend, FKM, FFKM, buna, buna/PP blend, EPDM, silicone
BODY MATERIALS	Polypropylene, celcon, nylon
SWITCH RANGE	20-150 psi (1.4-10 bar) or no switch
BYPASS RANGE	15-150 psi (1-10.4 bar) or no bypass
POWER	Electric: 12-36V DC, 110V AC, 230V AC Gas: air, $CO_2$ , or Nitrogen

COMMON BRAND ID						
BRAND NAME	ELASTOMER MATERIAL					
Geolast	Buna/PP blend					
Kalrez	Perfleuroelastomer (FFKM)					
Santoprene	EP/PP blend					
Viton	FKM					

The above defines the box for Flojet's standard products. As Flojet is also a motor manufacturer, we are capable of providing specific solutions to your pumping needs. If the above range is not suitable, please contact the factory to learn about our full range of Flojet diaphragm pumps.



Open Flow GPM (LPM)

### **SELF-PRIMING - WET AND DRY**

• Dry vertical lift from 2.5 (0.8m) up to an outstanding 27.9' (8.5m)

### **CAN RUN DRY WITHOUT DAMAGE**

- Flojet diaphragm pumps can run dry for extended periods with no damage
- Compatible with a wide range of chemicals
- Sealless design (no shaft seal, so less leak issues)

### **COMPACT SIZE AND LOW WEIGHT**

- Highest flow rates for their size
- Plug-in ports for easy installation and servicing
- Flojet pumps can be mounted easily anywhere with functional mounting platforms and simple connections – fit it anywhere and plumb up

### **SERVICE KITS AVAILABLE**

Modular design

**Motor Driven** 

Air Driven

- Low-cost, low-maintenance design means a trouble-free service life
- Spare parts and accessories are readily available and easy to install

### THE PRINCIPLE BEHIND POSITIVE DISPLACEMENT DIAPHRAGM PUMPS

Self-priming design allows pumps to create suction to draw fluid into pump without manual priming.

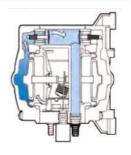


Fluid enters inlet port and is drawn through inlet check valve when piston moves away from the check valve.

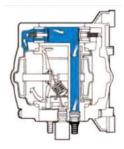


As piston moves toward the check valve assembly, the fluid is forced through the outlet check valve and out of the pump.

Air pressure directed by the stall-proof shuttle valve pulls the left diaphragm to create suction for the fluid being pumped.



Pressurized air is redirected behind the left diaphragm, causing a discharge stroke and forcing the fluid out. At the same time, the right diaphragm draws in more fluid.



Air is redirected to the right side by the shuttle valve as it repeats the above cycle, forcing fluid out at the right diaphragm and drawing fluid in at the left.



MOTOR DRIVEN



### **LF Plus Series**

















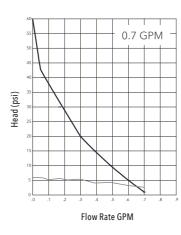
### **FOR INTERNATIONAL & US MARKETS**

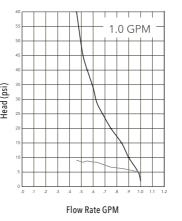
These pumps are the ideal solution for many applications including spraying, fluid transfer, filtration, cooling, dispensing and pressure boosting.

### **FEATURES**

- Sealed pressure switch automatically starts and stops pump when discharge valve opens and closes
- Self-priming so pump can be located above supply tank
- Can run dry for extended periods of time without damage
- Built-in thermal protector
- · Low amp draw for battery-powered applications
- Optional sealed motor with protective metal cooling finned cover

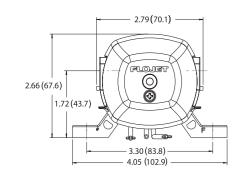
### PERFORMANCE

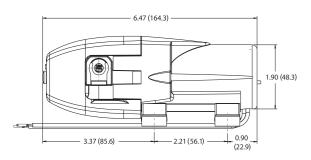




### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).





### **SPECIFICATIONS**

PUMP DESIGN	Reciprocating diaphragm
VOLTAGE**	12V DC, 24V DC, 115V AC
MAX FLOW RATE	0.6 GPM (2.3 LPM)-1 GPM (3.8 LPM)
DUTY CYCLE	Intermittent
MAX PRESSURE	40 psi (2.8 bar) when no pressure switch is present
PRESSURE SWITCH SETTING**	40 psi (2.8 bar) off, 25 psi (1.7 bar) on
SELF-PRIMING	Vertical height 30" (76cm)
PORTS*	Quick connect barb 1/4" (6mm) and 3/8" (10mm); John Guest/quick fit 1/4" (6mm) and 3/8" (10mm) straight and elbow available
HOUSING	Polypropylene
CHECK VALVE SPRING	Stainless steel
LIQUID TEMPERATURE RANGE	36°F (2°C) to 110°F (43°C)

### IOM #81000-230

- \* See accessories section
- \*\* See table

### **MODELS**

MODEL#	CE	VOLTAGE	OPEN FLOW	SWITCH	BYPASS	MAX AMP DRAW	DIAPHRAGM	CHECK	PORTS
LFP521002	No	115V AC	0.7 GPM (2.6 LPM)	No	No	0.3A	EP/PP blend	EPDM	Quick disconnect 3/8" (10mm) HB straight
LFP521402	No	115V AC	0.7 GPM (2.6 LPM)	40 psi (2.8 bar)	No	0.3A	EP/PP blend	EPDM	Quick disconnect 3/8" (10mm) HB straight
LFP521401	No	115V AC	0.7 GPM (2.6 LPM)	40 psi (2.8 bar)	No	0.3A	EP/PP blend	FKM	Quick disconnect 3/8" (10mm) HB straight
LFP521401	No	12V DC	0.7 GPM (2.6 LPM)	40 psi (2.8 bar)	55 psi (3.8 bar)	2A	EP/PP blend	FKM	Quick disconnect 3/8" (10mm) HB straight
LFP122201	RLFP122201	12V DC	1 GPM (3.8 LPM)	35 psi (2.4 bar)	No	3.5A	EP/PP blend	FKM	Quick disconnect 3/8" (10mm) HB straight
LFP122005	No	12V DC	1 GPM (3.8 LPM)	No	No	3.5A	Buna/PP blend	FKM	Quick disconnect 3/8" (10mm) HB straight
LFP122202	RLFP122202	12V DC	1 GPM (3.8 LPM)	35 psi (2.4 bar)	No	3.5A	EP/PP blend	EPDM	Quick disconnect 3/8" (10mm) HB straight
LFP122201	RLFP122201	12V DC	1 GPM (3.8 LPM)	35 psi (2.4 bar)	No	3.5A	EP/PP blend	FKM	Quick disconnect 3/8" (10mm) HB straight
LFP121421	RLFP121421	12V DC	0.7 GPM (2.6 LPM)	40 psi (2.8 bar)	55 psi (3.8 bar)	2A	EP/PP blend	FKM	Quick disconnect 3/8" (10mm) HB straight
LFP222002	RLFP222002	24V DC	1 GPM (3.8 LPM)	No	No	2A	EP/PP blend	EPDM	Quick disconnect 3/8" (10mm) HB straight
N/A	RLFP222202	24V DC	1 GPM (3.8 LPM)	35 psi (2.4 bar)	No	2A	EP/PP blend	EPDM	Quick disconnect 3/8" (10mm) HB straight
N/A	RFLP222201	24V DC	1 GPM (3.8 LPM)	35 psi (2.4 bar)	No	2A	EP/PP blend	FKM	Quick disconnect 3/8" (10mm) HB straight
N/A	RFLP221422	24V DC	0.7 GPM (2.6 LPM)	40 psi (2.8 bar)	55 psi (3.8 bar)	2A	EP/PP blend	EPDM	Quick disconnect 3/8" (10mm) HB straight

Additional pump models are available. Alternate barb sizes and tubing connection configurations are available. Please contact us if you do not see what you are looking for.

MOTOR DRIVEN



### **Duplex II Series**





















The Duplex II series of pumps incorporates the best technology and features developed by Flojet. Everything from the back-flow preventer, check valves, bearings and diaphragm assembly to the motor, has been designed to make this the most reliable diaphragm pump available. Higher efficiency of the pump is evident in the longer life of the motor pump unit. The diaphragm design combined with the new valves makes the pump capable of pulling higher dry vacuum. Duplex II is available in various performance ranges and voltages, and with a choice of elastomers, making it easily adaptable to a diverse range of applications.

### **FEATURES**

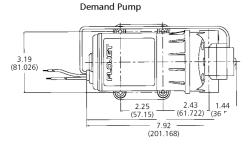
- Self-priming up to 8' (2.4m)
- Heavy duty ball bearing drive system
- Can run dry without damage
- UL, CSA and CE models available
- Chemically resistant materials
- Internal bypass standard
- Built-in back-flow preventer

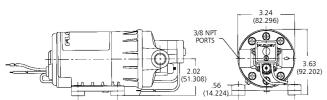
### **SPECIFICATIONS**

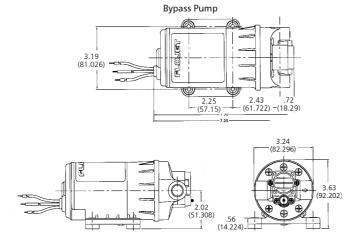
PUMP DESIGN	Positive displacement two-piston design
VOLTAGE	12V DC, 24V DC, 115V AC, 230V AC
MAX FLOW RATE	High Pressure – 2.2 GPM (8.3 LPM) Medium and Low Pressure – 1.6 GPM (6.1 LPM)
CYCLE	50/60Hz for AC models
MAX PRESURE	100 psi (6.9 bar)
PRESSURE SWITCH SETTING	15 psi (1.3 bar), 30 psi (2.1 bar), 45 psi (3.1 bar), 60 psi (4.1 bar), 80 psi (5.5 bar) and 100 psi (6.8 bar)
SELF-PRIMING	Up to 8' (2.4m)
PORTS	3/8" (10mm) NPT female
MOTOR	Permanent magnet with solid state rectifier
WETTED PARTS	Polypropylene, FKM, buna or EPDM
WEIGHT	4-5lb (1.8-2.3kg)

### **DIMENSIONAL DRAWINGS**

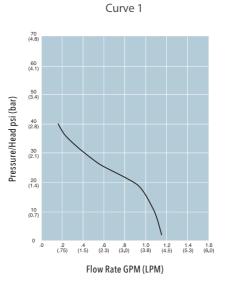
Unless otherwise stated, dimensions are in inches and (mm).

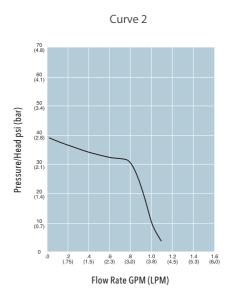


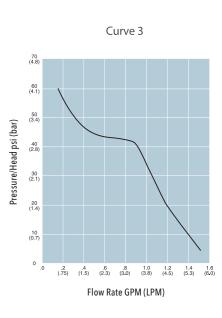


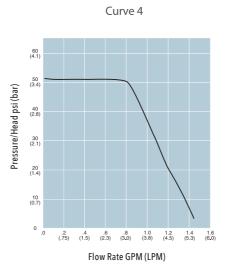


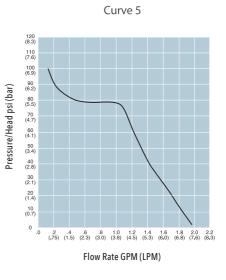
### **PERFORMANCE**

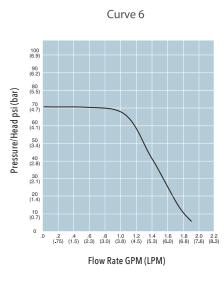












See following pages for model specification charts.

# 03 Diaphragm Pumps MOTOR DRIVEN



## Duplex II Series

MODEL#	CE	VOLTAGE	OPEN FLOW	SWITCH	BYPASS	MAX AMP DRAW	DIAPHRAGM	CHECK VALVE	CURVE#	NOTES
D3631B1311	N/A	115V AC	1.6 GPM (6.1 LPM)	No	50 psi (3.4 bar)	0.6A	Buna	Buna	4	
D3631B5011	N/A	115V AC	1.6 GPM (6.1 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	0.6A	Buna	Buna	3	
D3631V1311	N/A	115V AC	1.6 GPM (6.1 LPM)	No	50 psi (3.4 bar)	0.6A	FKM	FKM	4	
D3631V5011	N/A	115V AC	1.6 GPM (6.1 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	0.6A	FKM	FKM	3	
D3635B7011	N/A	115V AC	2 GPM (7.6 LPM)	100 psi (6.9 bar)	80 psi (5.5 bar)	0.8A	Buna	Buna	5	
D3835B5011	N/A	115V AC	2 GPM (7.6 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	0.6A	Buna	Buna	3	6' cord
D3835H5011	N/A	115V AC	2 GPM (7.6 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	0.6A	EP/PP blend	EPDM	3	6' cord
D3835V5011	N/A	115V AC	2 GPM (7.6 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	0.6A	FKM	FKM	3	6' cord
D21X003	N/A	12V DC	1.6 GPM (6.1 LPM)	No	No	9A	EP/PP blend	FKM	6	Inline fuse and rocker switch
D21X005	N/A	12V DC	2 GPM (7.6 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	7A	EP/PP blend	FKM	3	Inline fuse and rocker switch
D3131B1311	D3131B1311R	12V DC	1.6 GPM (6.1 LPM)	No	50 psi (3.4 bar)	7A	Buna	Buna	4	
D3131B5011	D3131B5011R	12V DC	1.6 GPM (6.1 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	7A	Buna	Buna	3	
D3131H1311	D3131H1311R	12V DC	1.6 GPM (6.1 LPM)	No	50 psi (3.4 bar)	7A	EP/PP blend	EPDM	4	
D3131H5011	D3131H5011R	12V DC	1.6 GPM (6.1 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	7A	EP/PP blend	EPDM	3	
D3131V1311	D3131V1311R	12V DC	1.6 GPM (6.1 LPM)	No	50 psi (3.4 bar)	7A	FKM	FKM	4	
D3131V5011	D3131V5011R	12V DC	1.6 GPM (6.1 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	7A	FKM	FKM	3	
D3135B7011	D3135B7011R	12V DC	2 GPM (7.6 LPM)	100 psi (6.9 bar)	80 psi (5.5 bar)	9A	Buna	Buna	5	
D3135H7011	D3135H7011R	12V DC	2 GPM (7.6 LPM)	100 psi (6.9 bar)	80 psi (5.5 bar)	9A	EP/PP blend	EPDM	5	
D3121V1211	D3121V1211R	12V DC	1.1 GPM (4.3 LPM)	No	30 psi (2.1 bar)	3A	FKM	FKM	1	
D3121V3011	D3121V3011R	12V DC	1.1 GPM (4.3 LPM)	30 psi (2.1 bar)	No	3A	FKM	FKM	2	
D3135B1411	D3135B1411R	12V DC	2 GPM (7.6 LPM)	No	70 psi (4.8 bar)	7A	Buna	Buna	6	
D71X000	N/A	12V DC	2 GPM (7.6 LPM)	No	50 psi (3.4 bar)	8A	Buna	Buna	6	Heavy duty motor
D71X001	N/A	12V DC	2 GPM (7.6 LPM)	No	50 psi (3.4 bar)	8A	Buna	Buna	6	Heavy duty motor and discharge left
D2131F5011	N/A	12V DC	1.6 GPM (6.1 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	0.6A	EP/PP blend	FKM	3	
D2131F5011	N/A	12V DC	1.6 GPM (6.1 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	0.6A	EP/PP blend	FKM	3	Heavy duty motor
D27X007	N/A	12V DC	1.6 GPM (6.1 LPM)	No	50 psi (3.4 bar)	10A	Buna	FKM	4	Inline fuse and rocker switch
D3732B1311	D3732B1311RL	230V AC	1.6 GPM (6.1 LPM)	No	50 psi (3.4 bar)	0.4A	Buna	Buna	4	
D3732B5011	D3732B5011RL	230V AC	1.6 GPM (6.1 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	0.6A	Buna	Buna	3	
D3732H1311	D3732H1311RL	230V AC	1.6 GPM (6.1 LPM)	No	50 psi (3.4 bar)	0.4A	EP/PP blend	EPDM	4	

MODEL#	CE	VOLTAGE	OPEN FLOW	SWITCH	BYPASS	MAX AMP DRAW	DIAPHRAGM	CHECK VALVE	CURVE#	NOTES
D3732H5011	D3732H5011RL	230V AC	1.6 GPM (6.1 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	0.6A	EP/PP blend	EPDM	3	
D3732V1311	D3732V1311RL	230V AC	1.6 GPM (6.1 LPM)	No	50 psi (3.4 bar)	0.4A	FKM	FKM	4	
D3732V5011	D3732V5011RL	230V AC	1.6 GPM (6.1 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	0.6A	FKM	FKM	3	
D3735B7011	D3735B7011RL	230V AC	2 GPM (7.6 LPM)	100 psi (6.9 bar)	80 psi (5.5 bar)	0.5A	Buna	Buna	5	
D3735H7011	D3735H7011RL	230V AC	2 GPM (7.6 LPM)	100 psi (6.9 bar)	80 psi (5.5 bar)	0.5A	EP/PP blend	EPDM	5	
D3231B1311	D3231B1311R	24V DC	1.6 GPM (6.1 LPM)	No	50 psi (3.4 bar)	3.5A	Buna	Buna	4	
D3231B5011	D3231B5011R	24V DC	1.6 GPM (6.1 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	3.5A	Buna	Buna	3	
D3231H1311	D3231H1311R	24V DC	1.6 GPM (6.1 LPM)	No	50 psi (3.4 bar)	3.5A	EP/PP blend	EPDM	4	
D3231H5011	D3231H5011R	24V DC	1.6 GPM (6.1 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	3.5A	EP/PP blend	EPDM	3	
D3231V1311	D3231V1311R	24V DC	1.6 GPM (6.1 LPM)	No	50 psi (3.4 bar)	3.5A	FKM	FKM	4	
D3231V5011	D3231V5011R	24V DC	1.6 GPM (6.1 LPM)	60 psi (4.1 bar)	40 psi (2.8 bar)	3.5A	FKM	FKM	3	
D3235B7011	D3235B7011R	24V DC	2 GPM (7.6 LPM)	100 psi (6.9 bar)	80 psi (5.5 bar)	4.5A	Buna	Buna	5	
D3235H7011	D3235H7011R	24V DC	2 GPM (7.6 LPM)	100 psi (6.9 bar)	80 psi (5.5 bar)	4.5A	EP/PP blend	EPDM	5	
D3221V1211	D3221V1211R	24V DC	1.1 GPM (4.3 LPM)	No	30 psi (2.1 bar)	1.5A	FKM	FKM	1	
D3221V3011	D3221V3011R	24V DC	1.1 GPM (4.3 LPM)	30 psi (2.1 bar)	No	1.5A	FKM	FKM	2	
D1335E7011	N/A	36V DC	2 GPM (7.6 LPM)	100 psi (6.9 bar)	80 psi (5.5 bar)	0.5A	EPDM	EPDM	5	

MOTOR DRIVEN

### **Triplex Compact Series**













The Triplex Compact range pump was designed specifically for the agricultural market. Flojet's three chamber design, including versatile features, makes it ideal for sprayers, transfer and dispensing applications. This automatic demand pump is fitted with a sealed pressure switch and motor. It has the ideal footprint for installation in areas with space restrictions.

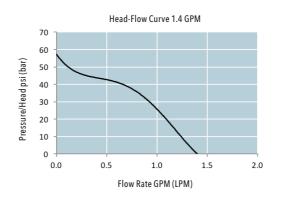
### **FEATURES**

- Compact automatic demand pump
- Sealed pressure switch and motor
- Self-priming; pump can be located above supply tank
- Can run dry for extended periods of time without damage
- Flow rates to 2 GPM (7.6 LPM) and operating pressure to 60 psi (4.1 bar)

### **APPLICATIONS**

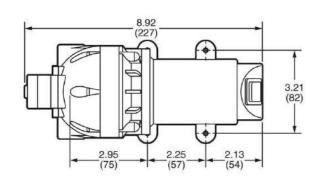
- Small boom and spot spraying
- Foam marking
- Silage treatment
- Estate spraying
- Livestock and poultry cooling
- Dispensing
- Transfer of liquids

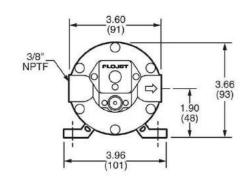
### PERFORMANCE

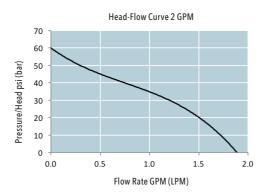


### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).







### **SPECIFICATIONS**

PUMP DESIGN	Motor-operated, 3-chamber diaphragm
VOLTAGE	12V DC, 24V DC
MAX FLOW RATE	2 GPM (7.6 LPM)
DUTY CYCLE	Intermittent
MAX PRESSURE	60 psi (4.1 bar)
PORTS	3/8" (10mm) NPTF
LIQUID TEMPERATURE RANGE	40°F (4°C) to 140°F (60°C)
CERTIFICATIONS	CE, NSF components
WEIGHT	3.4lb (1.5kg)

### **MODELS**

MODEL#	CE	VOLTAGE	OPEN FLOW	SWITCH	BYPASS	MAX AMP DRAW	DIAPHRAGM	CHECK VALVE	CURVE #
03501132	R3501132	12V	1.4 GPM (5.3 LPM)	60 psi (4.1 bar)	Yes	6A	EP/PP blend	FKM	1
03501136	R3501136	12V	2 GPM (7.6 LPM)	60 psi (4.1 bar)	Yes	8A	EP/PP blend	FKM	2
03501142	R3501142	12V	1.4 GPM (5.3 LPM)	60 psi (4.1 bar)	Yes	6A	EP/PP blend	EPDM	1
03501146	R3501146	12V	2 GPM (7.6 LPM)	60 psi (4.1 bar)	Yes	8A	EP/PP blend	EPDM	2
03B01132	R3B01132	12V	1.4 GPM (5.3 LPM)	No	50 psi (3.4 bar)	6A	EP/PP blend	FKM	1
03B01136	R3B01136	12V	2 GPM (7.6 LPM)	No	50 psi (3.4 bar)	8A	EP/PP blend	FKM	2
03B01142	R3B01142	12V	1.4 GPM (5.3 LPM)	No	50 psi (3.4 bar)	6A	EP/PP blend	EPDM	1
03B01146	R3B01146	12V	2 GPM (7.6 LPM)	No	50 psi (3.4 bar)	8A	EP/PP blend	EPDM	2
03501332	R3501332	24V	1.4 GPM (5.3 LPM)	60 psi (4.1 bar)	Yes	3A	EP/PP blend	FKM	1
03501336	R3501336	24V	2 GPM (7.6 LPM)	60 psi (4.1 bar)	Yes	4A	EP/PP blend	FKM	2
03501342	R3501342	24V	1.4 GPM (5.3 LPM)	60 psi (4.1 bar)	Yes	3A	EP/PP blend	EPDM	1
03501346	R3501346	24V	2 GPM (7.6 LPM)	60 psi (4.1 bar)	Yes	4A	EP/PP blend	EPDM	2
03B01332	R3B01332	24V	1.4 GPM (5.3 LPM)	No	50 psi (3.4 bar)	3A	EP/PP blend	FKM	1
03B01336	R3B01336	24V	2 GPM (7.6 LPM)	No	50 psi (3.4 bar)	4A	EP/PP blend	FKM	2
03B01342	R3B01342	24V	1.4 GPM (5.3 LPM)	No	50 psi (3.4 bar)	3A	EP/PP blend	EPDM	1
03B01346	R3B01346	24V	2 GPM (7.6 LPM)	No	50 psi (3.4 bar)	4A	EP/PP blend	EPDM	2

MOTOR DRIVEN



### Triplex Hi-Pressure Series













Flojet Triplex Hi-Pressure diaphragm pumps are capable of pressures up to 150 psi (10.3 bar), some of the highest pressures available in the diaphragm pump industry. This is ideal for applications such as spraying, misting, filtration, cooling, dispensing and pressure boosting.

### **FEATURES**

- Constructed from a selection of materials suitable for handling a broad range of chemicals
- Sealed pressure switch and motor
- Self-priming up to 8' (2.4m); pump can be located above supply tank
- Can run dry for extended periods of time without damage
- Flow rates to 1.4 GPM (5.5 LPM) and operating pressure to 150 psi (11 bar)

### **APPLICATIONS**

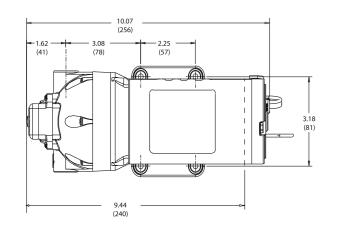
- Designed for wide range of applications
- Small boom and spot spraying
- Silage treatment
- Estate spraying
- Livestock and poultry cooling
- Dispensing
- Transfer of liquids

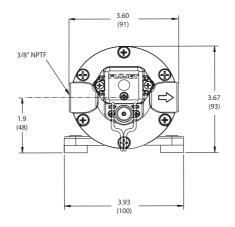
### **SPECIFICATIONS**

PUMP DESIGN	Motor-operated, 3-chamber diaphragm
VOLTAGE	12V DC, 24V DC, 115V AC, 230V AC
MAX FLOW RATE	1.4 GPM (5.5 LPM)
DUTY CYCLE	Intermittent
CYCLES	50/60Hz
MAX PRESSURE	Switch cutoff – 150 psi (101 bar) Max running pressure – 140 psi (9.7 bar)
PORTS	3/8" (10mm) NPTF
MOTOR	Permanent magnet DC and rectified (PMDC) AC
PUMP HEAD	Glass-filled nylon
ELASTOMERS DIAPHRAGM	EP/PP blend
CHECK VALVE*	EPDM or FKM
LIQUID TEMPERATURE RANGE	40°F (4°C) to 140°F (60°C)
CERTIFICATIONS	CE, NSF components
WEIGHT	7.6lb (3.5kg)

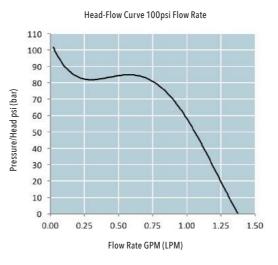
### **DIMENSIONAL DRAWINGS**

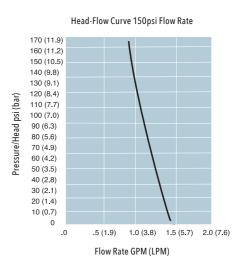
Unless otherwise stated, dimensions are in inches and (mm).





### **PERFORMANCE**





### **MODELS**

MODEL#	CE	VOLTAGE	OPEN FLOW	SWITCH	BYPASS	MAX AMP DRAW	DIAPHRAGM	CHECK VALVE
03711133	R3711133	12V	1.4 GPM (5.3 LPM)	100 psi (6.9 bar)	Yes	9A	EP/PP blend	FKM
03711143	R3711143	12V	1.4 GPM (5.3 LPM)	100 psi (6.9 bar)	Yes	9A	EP/PP blend	EPDM
03811133	R3811133	12V	1.4 GPM (5.3 LPM)	150 psi (10.3 bar)	No	10A	EP/PP blend	FKM
03811143	R3811143	12V	1.4 GPM (5.3 LPM)	150 psi (10.3 bar)	No	10A	EP/PP blend	EPDM
03711333	R3711333	24V	1.4 GPM (5.3 LPM)	100 psi (6.9 bar)	Yes	4A	EP/PP blend	FKM
03711343	R3711343	24V	1.4 GPM (5.3 LPM)	100 psi (6.9 bar)	Yes	4A	EP/PP blend	EPDM
03811333	R3811333	24V	1.4 GPM (5.3 LPM)	150 psi (10.3 bar)	No	5A	EP/PP blend	FKM
03811343	R3811343	24V	1.4 GPM (5.3 LPM)	150 psi (10.3 bar)	No	5A	EP/PP blend	EPDM
03711033	N/A	115V	1.4 GPM (5.3 LPM)	100 psi (6.9 bar)	Yes	1A	EP/PP blend	FKM
03711043	N/A	115V	1.4 GPM (5.3 LPM)	100 psi (6.9 bar)	Yes	1A	EP/PP blend	EPDM
03811033	N/A	115V	1.4 GPM (5.3 LPM)	150 psi (10.3 bar)	No	1A	EP/PP blend	FKM
03811043	N/A	115V	1.4 GPM (5.3 LPM)	150 psi (10.3 bar)	No	1A	EP/PP blend	EPDM
03711233	R3711233	230V	1.4 GPM (5.3 LPM)	100 psi (6.9 bar)	Yes	0.6A	EP/PP blend	FKM
03711243	R3711243	230V	1.4 GPM (5.3 LPM)	100 psi (6.9 bar)	Yes	0.6A	EP/PP blend	EPDM
03811233	R3811233	230V	1.4 GPM (5.3 LPM)	150 psi (10.3 bar)	No	0.6A	EP/PP blend	FKM
03811243	R3811243	230V	1.4 GPM (5.3 LPM)	150 psi (10.3 bar)	No	0.6A	EP/PP blend	EPDM





### **Triplex Hi-Flow Series**









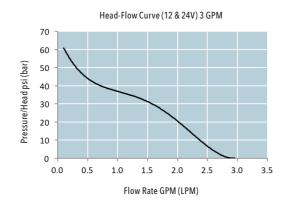




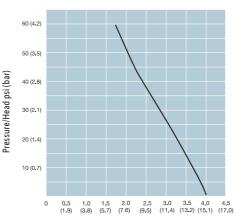
Flojet Triplex Hi-Flow series pumps are designed for a wide range of applications and are constructed from a selection of materials suitable for handling a broad range of chemicals. The Triplex Hi-Flow pumps are self-priming and can run dry without harm.

### PERFORMANCE





Head-Flow Curve (12V and 24V DC) 4 GPM



Flow Rate GPM (LPM)

### **SPECIFICATIONS**

PUMP DESIGN	3-chamber diaphragm
VOLTAGE	12V DC, 24V DC
MAX FLOW RATE	4 GPM (15.1 LPM)
MAX PRESSURE	Switch cutoff – 60 psi (4.1 bar) Max running pressure – 50 psi (3.4 bar)
PUMP HEAD	Polypropylene
DIAPHRAGM	EP/PP blend
IP RATING	IP54
WEIGHT	5.1lb (2.3kg)

### **MODELS**

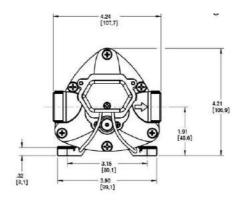
MODEL#	CE	VOLTAGE	OPEN FLOW	MAX AMP DRAW	SWITCH	BYPASS	CHECK VALVE
03521134	R3521134	12V	3 GPM (11.4 LPM)	5.2A	50 psi (3.4 bar)	Yes	FKM
03521139	R3521139	12V	4 GPM (15.1 LPM)	12A	60 psi (4.1 bar)	Yes	FKM
03521144	R3521144	12V	3 GPM (11.4 LPM)	5.2A	50 psi (3.4 bar)	Yes	EPDM
03521149	R3521149	12V	4 GPM (15.1 LPM)	12A	60 psi (4.1 bar)	Yes	EPDM
03521334	R3521334	24V	3 GPM (11.4 LPM)	2.5A	50 psi (3.4 bar)	Yes	FKM
03521339	R3521339	24V	4 GPM (15.1 LPM)	7A	60 psi (4.1 bar)	Yes	FKM
03521344	R3521344	24V	3 GPM (11.4 LPM)	2.5A	50 psi (3.4 bar)	Yes	EPDM
03521349	R3521349	24V	4 GPM (15.1 LPM)	7A	60 psi (4.1 bar)	Yes	EPDM

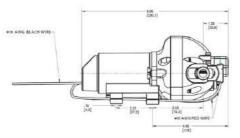
### **HEAVY DUTY MODELS**

MODEL#	CE	VOLTAGE	OPEN FLOW	MAX AMP DRAW	SWITCH	BYPASS	CHECK VALVE
N/A	R3B21500	12V	3.5 GPM (13.2 LPM)	8.5A	No	50 psi (3.4 bar)	FKM
N/A	R3B21501	24V	3.5 GPM (13.2 LPM)	5A	No	50 psi (3.4 bar)	FKM
N/A	R3B21502	12V	2.1 GPM (7.9 LPM)	4A	No	50 psi (3.4 bar)	FKM
N/A	R3B21503	24V	2.1 GPM (7.9 LPM)	4A	No	50 psi (3.4 bar)	FKM

### 3 GPM **DIMENSIONAL DRAWINGS**

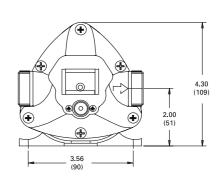
Unless otherwise stated, dimensions are in inches and (mm).

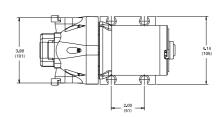




### 4 GPM **DIMENSIONAL DRAWINGS**

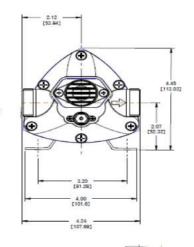
Unless otherwise stated, dimensions are in inches and (mm).

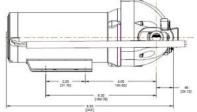




### R3B21 (HEAVY DUTY) ROAD ROLLER **PUMP DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).





MOTOR DRIVEN



### **Quad Series**















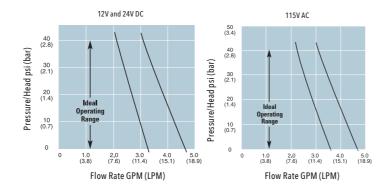




Flojet developed the Quad pumps to deliver higher flows up to 5 GPM (18.9 LPM) using a four-piston design with excellent self-priming capability.

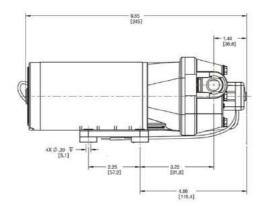
- Built-in pressure switch automatically starts and stops pump when discharge valve opens and closes
- Compact design and plug-in port fittings make installation easy
- Can run dry without damage and handle liquids up to 130°F (54°C)
- Excellent self-priming capability; pump may be located above the liquid level

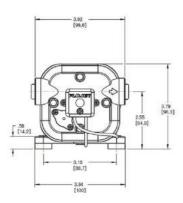
### PERFORMANCE



### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).





### **SPECIFICATIONS**

VOLTAGE	12V and 24V DC, 115V and 230V AC
FLOW RATE	3.5-5 GPM (13.2-18.9 LPM) nominal
MAX PRESSURE	40 psi (2.8 bar)
PRESSURE SWITCH SETTING	45 psi (3.2 bar) cut-out
SELF-PRIMING	Up to 8' (2.4m) vertical height
PORTS*	Plug-in ports 1/2" (13mm) or 3/4" (19mm) hose barb standard
WEIGHT	4lb (2kg)

<sup>\*</sup>Consult your local Flojet representative for other types of port fittings.

### **MODELS**

MODEL#	CE	VOLTAGE	OPEN FLOW	SWITCH	MAX AMP DRAW	DIAPHRAGM	CHECK VALVE	FITTINGS	COMMENTS
04100113	N/A	12V	5 GPM (19 LPM)	No	10A	Buna/PP blend	Buna	3/4" (19mm) HB ST	
04100143	R4100143	12V	5 GPM (19 LPM)	No	10A	EP/PP blend	EPDM	3/4" (19mm) HB ST	
04100505	N/A	12V	3.7 GPM (14 LPM)	No	10A	EP/PP blend	FKM	1/2" (13mm) HB ST	
04300112	N/A	12V	3.7 GPM (14 LPM)	45 psi (3.1 bar)	10A	Buna/PP blend	Buna	1/2" (13mm) HB ST	
04300142	R4300142	12V	3.7 GPM (14 LPM)	45 psi (3.1 bar)	9A	EP/PP blend	EPDM	1/2" (13mm) HB ST	
04300143	R4300143	12V	5 GPM (19 LPM)	45 psi (3.1 bar)	13A	EP/PP blend	EPDM	3/4" (19mm) HB ST	
04300500	R4300500	12V	3.7 GPM (14 LPM)	45 psi (3.1 bar)	10A	EP/PP blend	FKM	1/2" (13mm) HB ST	
04300504	R4300504	12V	5 GPM (19 LPM)	45 psi (3.1 bar)	13A	EP/PP blend	FKM	3/4" (19mm) HB ST	
04300506	R4300506	12V	5 GPM (19 LPM)	45 psi (3.1 bar)	13A	Buna/PP blend	Buna	3/4" (19mm) HB ST	
04300528	N/A	12V	3.8 GPM (14.5 LPM)	45 psi (3.1 bar)	11A	EP/PP blend	FKM	1/2" (13mm) HB ST and GH x 1/2" (13mm) MNPT	Inline connector, rocker switch
04100343	R4100343	24V	5 GPM (19 LPM)	No	4A	EP/PP blend	EPDM	3/4" (19mm) HB ST	
04300342	R4300342	24V	3.7 GPM (14 LPM)	45 psi (3.1 bar)	5A	EP/PP blend	EPDM	1/2" (13mm) HB ST	
04300343	R4300343	24V	5 GPM (19 LPM)	45 psi (3.1 bar)	5A	EP/PP blend	EPDM	3/4" (19mm) HB ST	
04100511	N/A	36V	5 GPM (19 LPM)	No	2.3A	EP/PP blend	FKM	3/4" (19mm) HB ST	
04100500	R4100500	115V AC	3.7 GPM (14 LPM)	No	1.2A	EP/PP blend	EPDM	1/2" (13mm) HB ST	
04100502	N/A	115V AC	5 GPM (19 LPM)	No	1.2A	EP/PP blend	FKM	3/4" (19mm) HB ST	
04300042	N/A	115V AC	3.7 GPM (14 LPM)	45 psi (3.1 bar)	1A	EP/PP blend	EPDM	1/2" (13mm) HB ST	
04300043	N/A	115V AC	5 GPM (19 LPM)	45 psi (3.1 bar)	1A	EP/PP blend	EPDM	3/4" (19mm) HB ST	
04300501	R4300501	115V AC	3.7 GPM (14 LPM)	45 psi (3.1 bar)	1.5A	EP/PP blend	FKM	1/2" (13mm) HB ST	
04300515	N/A	115V AC	5 GPM (19 LPM)	45 psi (3.1 bar)	1.5A	EP/PP blend	FKM	3/4" (19mm) HB ST	
04300525	N/A	115V AC	5 GPM (19 LPM)	45 psi (3.1 bar)	1.5A	EP/PP blend	FKM	3/4" (19mm) HB ST	6' (1.8m) cord
04300529	N/A	115V AC	3 GPM (11.5 LPM)	40 psi (2.8 bar)	1.8A	EP/PP blend	FKM	1/2" (13mm) HB ST	Cord/continuous duty/induction motor
04300531	N/A	115V AC	3 GPM (11.5 LPM)	40 psi (2.8 bar)	1.8A	EP/PP blend	EPDM	1/2" (13mm) HB ST	Cord/continuous duty/induction motor
1102010211	N/A	115V AC	5 GPM (19 LPM)	No	1.5A	EP/PP blend	FKM	3/4" (19mm) HB ST	6' (1.8m) cord
1103050211	N/A	115V AC	5 GPM (19 LPM)	No	1.5A	EP/PP blend	EPDM	3/4" (19mm) HB ST	6' (1.8m) cord
1304010110	N/A	115V AC	3.7 GPM (14 LPM)	45 psi (3.1 bar)	1.5A	EP/PP blend	FKM	1/2" (13mm) HB ST	6' (1.8m) cord
R4300538	R4300538	230V AC	4.5 GPM (17 LPM)	35 psi (2.4 bar)	2A	EP/PP blend	EPDM	3/4" (19mm) HB ST and 1/2" (13mm) HB ELB	Continuous duty/induction motor/
R4300539	R4300539	230V AC	3.5 GPM (13 LPM)	35 psi (2.4 bar)	2A	EP/PP blend	EPDM	3/4" (19mm) HB ST and 1/2" (13mm) HB ELB	Continuous duty/ induction motor/
R4320242	R4320242	230V AC	3.7 GPM (14 LPM)	35 psi (2.4 bar)	N/A	EP/PP blend	EPDM	1/2" (13mm) HB ST	
R4320243	R4320243	230V AC	5 GPM (19 LPM)	35 psi (2.4 bar)	0.7A	EP/PP blend	EPDM	3/4" (19mm) HB ST	
R4320252	R4320252	230V AC	3.7 GPM (14 LPM)	35 psi (2.4 bar)	0.6A	EP/PP blend	FKM	1/2" (13mm) HB ST	
R4320253	R4320253	230V AC	5 GPM (19 LPM)	35 psi (2.4 bar)	0.7A	EP/PP blend	FKM	3/4" (19mm) HB ST	

MOTOR DRIVEN



### Versijet<sup>™</sup> Series









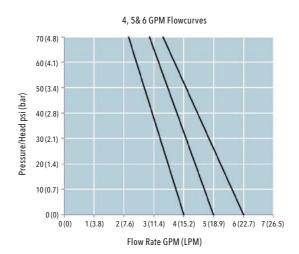


The Flojet Versijet series' robust five chamber design, large robust motor, and choice of elastomers make this the ideal pump for higher flow, heavy duty applications.

### **FEATURES**

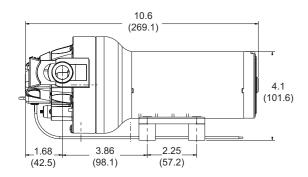
- Flow rates up to 6 GPM (22.7 LPM) and pressure of up to 70 psi (4.8 bar)
- Designed to handle a broad range
- Flojet's patented co-injected molded diaphragm and larger motor brushes significantly extend pump life up to 50% longer than existing Flojet Quad series diaphragm pumps
- Sealed motor and pressure switch provide years of dependable reliability
- Self-priming up to 10' (3m) (wetted)
- IPX6 rated

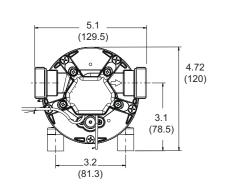
### **PERFORMANCE**



### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).





Note: 4 GPM model overall length 9.9" (252mm). All other dimensions are the same as the 5 GPM/6 GPM models.

### **SPECIFICATIONS**

PUMP DESIGN	Permanent Magnet TENV (non-ventilated)	
VOLTAGE	12V DC, 24V DC, 115V AC	
MAX FLOW RATE	6 GPM (22.7 LPM)	
DUTY CYCLE	Intermittent	
MAX PRESSURE	70 psi (4.8 bar)	
PORTS	4 GPM - 1/2" (13mm) HB 5 and 6 GPM - 3/4" (19mm) HB	
	Other options available on request	
PUMP HEAD	Glass-filled nylon	
DIAPHRAGM	EP/PP blend	
DIAPHRAGM CHECK VALVE	,	
-	EP/PP blend	
CHECK VALVE	EP/PP blend Glass-filled nylon, EPDM	

### **MODELS**

MODEL#	OPEN FLOW	VOLTAGE	SWITCH	DIAPHRAGM	CHECK VALVE	MAX AMP DRAW
R8400144	4 GPM (15.1 LPM)	12V DC	70 psi (4.8 bar)	EP/PP blend	EPDM	7A
R8400134	4 GPM (15.1 LPM)	12V DC	70 psi (4.8 bar)	EP/PP blend	FKM	8A
R8410144	4 GPM (15.1 LPM)	12V DC	No	EP/PP blend	EPDM	10A
R8410134	4 GPM (15.1 LPM)	12V DC	No	EP/PP blend	FKM	7A
R8400344	4 GPM (15.1 LPM)	24V DC	70 psi (4.8 bar)	EP/PP blend	EPDM	8A
R8400334	4 GPM (15.1 LPM)	24V DC	70 psi (4.8 bar)	EP/PP blend	FKM	10A
R8410344	4 GPM (15.1 LPM)	24V DC	No	EP/PP blend	EPDM	7A
R8410334	4 GPM (15.1 LPM)	24V DC	No	EP/PP blend	FKM	8A
R8500144	5 GPM (18.9 LPM)	12V DC	70 psi (4.8 bar)	EP/PP blend	EPDM	10A
R8500134	5 GPM (18.9 LPM)	12V DC	70 psi (4.8 bar)	EP/PP blend	FKM	7A
R8510144	5 GPM (18.9 LPM)	12V DC	No	EP/PP blend	EPDM	8A
R8510134	5 GPM (18.9 LPM)	12V DC	No	EP/PP blend	FKM	10A
R8500344	5 GPM (18.9 LPM)	24V DC	70 psi (4.8 bar)	EP/PP blend	EPDM	12A
R8500334	5 GPM (18.9 LPM)	24V DC	70 psi (4.8 bar)	EP/PP blend	FKM	16A
R8510344	5 GPM (18.9 LPM)	24V DC	No	EP/PP blend	EPDM	18A
R8510334	5 GPM (18.9 LPM)	24V DC	No	EP/PP blend	FKM	12A
R8600144	6 GPM (22.7 LPM)	12V DC	70 psi (4.8 bar)	EP/PP blend	EPDM	16A
R8600134	6 GPM (22.7 LPM)	12V DC	70 psi (4.8 bar)	EP/PP blend	FKM	18A
R8610144	6 GPM (22.7 LPM)	12V DC	No	EP/PP blend	EPDM	12A
R8610134	6 GPM (22.7 LPM)	12V DC	No	EP/PP blend	FKM	16A
R8600344	6 GPM (22.7 LPM)	24V DC	70 psi (4.8 bar)	EP/PP blend	EPDM	18A
R8600334	6 GPM (22.7 LPM)	24V DC	70 psi (4.8 bar)	EP/PP blend	FKM	12A
R8610344	6 GPM (22.7 LPM)	24V DC	No	EP/PP blend	EPDM	16A
R8610334	6 GPM (22.7 LPM)	24V DC	No	EP/PP blend	FKM	18A

Note: Some versions available with Polypropylene pumpheads. Please enquire with factory for details.

115V AC models availabe for many of the configurations

MOTOR DRIVEN



### AC Variable Speed Drive Series













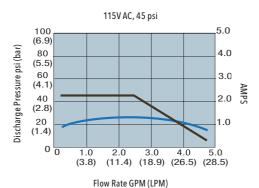
### **FOR INTERNATIONAL & US MARKETS**

The ACVariable Speed Drive constant pressure pump system matches motor speed to system demand. As more liquid is needed, the motor responds to increase flow. Conversely, as the demand lessens, the motor slows to a "super quiet" speed, always maintaining a constant system pressure. The result is exceptionally stable flow and reduced amp draw. The Flojet AC VSD sensor-controlled pumps provide stable, constant-pressure operation on any AC application. Operation from no flow to maximum flow is proportionally controlled, eliminating unwanted pump switch cycling and the need for an accumulator tank.

### **FEATURES**

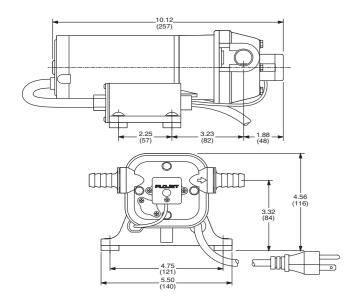
- Maintains steady fluid pressure in response to variable flow demand
- · Conserves energy, low amp draw
- Quiet running under normal use
- Automatically adjusts motor speed to maintain pressure
- Improves overall system performance
- Eliminates bulky accumulator tank for limited space requirements

### PERFORMANCE



### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



### **SPECIFICATIONS**

PUMP DESIGN	Positive displacement diaphragm (4 piston)
VOLTAGE	115V AC
MAX AMP DRAW	1.5 A
MAX FLOW RATE	5 GPM (19 LPM) open flow
DUTY CYCLE	Intermittent
CYCLES	60 Hz
MOTOR	Permanent magnet rectified
MAX LIQUID TEMPERATURE	130°F (55°C)
CERTIFICATIONS	UL listed, NSF
DIMENSIONS	4-5/16" high x 10-1/8" long x 5-1/2" wide (110mm x 257mm x 140mm)
WEIGHT	6.63lb (3kg)
WARRANTY	1 year

### **MODELS**

MODEL#	CE	OPEN FLOW	SWITCH	DIAPHRAGM	CHECK VALVE	FITTINGS
04524500A	No	5 GPM (18.9 LPM)	45 psi (3.1 bar)	EP/PP alloy	EPDM	3/8"-1/2" (10-13mm) HB
04524501A	No	5 GPM (18.9 LPM)	30 psi (2.1 bar)	EP/PP alloy	EPDM	3/8"-1/2" (10-13mm) HB

AIR DRIVEN



### **G57 Series**













### **FOR INTERNATIONAL & US MARKETS**

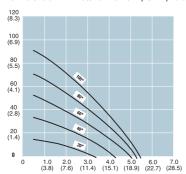
Innovative compact design features a patented shuttle valve that eliminates stalling and provides a long life. Features a chemically resistant polypropylene body with a choice of EP/PP blend, FKM or FFKM elastomers, as well as quick disconnect liquid and gas port fittings for easy installation.

### **FEATURES**

- Highest flow rate for any air pump of comparable size
- Stall-proof design with patented shuttle valve
- Easy installation with all quick disconnect ports
- Robust design with durable integral mounting
- Sanitary design with inset molded diaphragm
- Leak resistant radial seals, no critical O-ring seals
- Quiet operation with large exhaust muffler

### **PERFORMANCE**

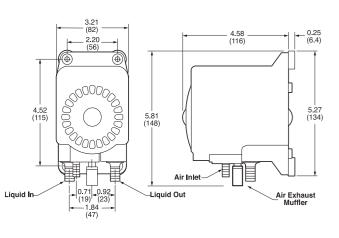
EP/PP blend or FKM Material with 1/2" (13mm) Ports



Flow Rate GPM (LPM)
\*Indicates air inlet pressures.

### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



### **SPECIFICATIONS**

PUMP DESIGN	Air-operated positive displacement double diaphragm pump
MAX FLOW RATE	5 GPM (18.9 LPM)
PRESSURE	20-100 psi (1.4-6.9 bar) (same as inlet air pressure)
PORTS	Liquid – 3/8" (10mm), 1.2" (13mm) and 3/4" (19mm) HB; 3/8" (10mm) and 1/2" (13mm) MNPT Air inlet – 1/4" (6mm) HB
BODY	Polypropylene
DIAPHRAGM	EP/PP blend, FKM, FFKM
CHECK VALVES	EP/PP blend, FKM, FKM Extreme
CHECK VALVE SPRING	Hasteloy C
WEIGHT	1.2lb (0.5kg)

### **MODELS**

MODEL#	OPEN FLOW	DIAPHRAGM	CHECK VALVE	LIQUID FITTINGS	AIR INLET
G573000	5 GPM (18.9 LPM)	FKM	Polypropylene	None	None
G573205	5 GPM (18.9 LPM)	FKM	Polypropylene	3/8"-1/2" (10-13mm) HB ST	1/4" (6mm) HB brass
G573215	5 GPM (18.9 LPM)	FKM	Polypropylene	1/2" (13mm) HB ST	1/4" (6mm) HB brass
G573225	5 GPM (18.9 LPM)	FKM	Polypropylene	3/4" (19mm) HB ST	1/4" (6mm) HB brass
G573145	5 GPM (18.9 LPM)	FKM	Polypropylene	1/2" (13mm) OD JG	1/4" (6mm) HB brass
G573185	5 GPM (18.9 LPM)	FKM	Polypropylene	3/8" (10mm) MNPT ST	1/4" (6mm) HB brass
G573175	5 GPM (18.9 LPM)	FKM	Polypropylene	1/2" (13mm) MNPT ST	1/4" (6mm) HB brass
G575005	5 GPM (18.9 LPM)	EP/PP blend	Polypropylene	None	1/4" (6mm) HB brass
G575205	5 GPM (18.9 LPM)	EP/PP blend	Polypropylene	3/8" (10mm) HB ST	1/4" (6mm) HB brass
G575215	5 GPM (18.9 LPM)	EP/PP blend	Polypropylene	1/2" (13mm) HB ST	1/4" (6mm) HB brass
G575225	5 GPM (18.9 LPM)	EP/PP blend	Polypropylene	3/4" (19mm) HB ST	1/4" (6mm) HB brass
G575145	5 GPM (18.9 LPM)	EP/PP blend	Polypropylene	1/2" (13mm) OD JG	1/4" (6mm) HB brass
G575185	5 GPM (18.9 LPM)	EP/PP blend	Polypropylene	3/8" (10mm) MNPT ST	1/4" (6mm) HB brass
G575175	5 GPM (18.9 LPM)	EP/PP blend	Polypropylene	1/2" (13mm) MNPT ST	1/4" (6mm) HB brass
G57C002	5 GPM (18.9 LPM)	FFKM	Polypropylene	None	1/4" (6mm) HB brass
G57C202	5 GPM (18.9 LPM)	FFKM	Polypropylene	3/8"-1/2" (10-13mm) HB ST	1/4" (6mm) HB brass
G57C203	5 GPM (18.9 LPM)	FFKM	Polypropylene	3/8"-1/2" (10-13mm) HB ST	1/4" (6mm) HB EL brass
G57C212	5 GPM (18.9 LPM)	FFKM	Polypropylene	1/2" (13mm) HB ST	1/4" (6mm) HB brass
G57C213	5 GPM (18.9 LPM)	FFKM	Polypropylene	1/2" (13mm) HB ST	1/4" (6mm) HB EL brass
G57C222	5 GPM (18.9 LPM)	FFKM	Polypropylene	3/4" (19mm) HB ST	1/4" (6mm) HB brass
G57C223	5 GPM (18.9 LPM)	FFKM	Polypropylene	3/4" (19mm) HB ST	1/4" (6mm) HB EL brass
G57C182	5 GPM (18.9 LPM)	FFKM	Polypropylene	3/8" (10mm) MNPT ST	1/4" (6mm) HB brass
G57C172	5 GPM (18.9 LPM)	FFKM	Polypropylene	1/2" (13mm) MNPT ST	1/4" (6mm) HB brass
G57C152	5 GPM (18.9 LPM)	FFKM	Polypropylene	3/8" (10mm) OD JG	1/4" (6mm) HB brass
G57C412	5 GPM (18.9 LPM)	FFKM	Polypropylene	1/2" (13mm) OD JG	1/4" (6mm) HB brass

AIR DRIVEN



#### G70 & G71







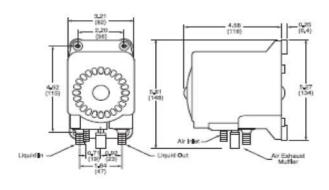






#### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



#### **FOR INTERNATIONAL & US MARKETS**

This ATEX Certified Air operated pump is designed to be the ultimate in performance and reliability. Our robust design combines innovative features and relentless testing to offer a pump that has a long, trouble free service life.

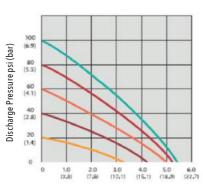
#### **FEATURES**

- Capable of air inlet pressures up to 100 psi (6.9 bar)
- Robust design with durable integral mounting
- Patented shuttle valve eliminates stalling when used with dry air
- Capable of passing solids up to 1/8" (3.2mm) diameter easliy with large clog-free check valves
- Corrosion resistant materials capable of handling a wide range of chemicals
- Leak resistant made from Viton\* Extreme™ O-ring seals
- Ease of installation with all plug-in ports
- John Guest\* hose barb, NPT and elbow configurations available
- Low air consumption compared with other pumps in its class

#### **APPLICATIONS**

- · Chemical transfer and dispensing
- Solvent applications
- Parts washers
- Ink transfer
- Car wash systems
- Any application requiring ATEX approval

#### **PERFORMANCE**



Flow Rate GPM (LPM)

#### **SPECIFICATIONS**

PUMP DESIGN	Air-operated positive displacement double diaphragm pump	
MAX FLOW RATE	5 GPM (18.9 LPM)	
PRESSURE 20–100 psi (1.4–6.9 bar) (same as inlet air pressure)		
PORTS	Liquid – 3/8" (10mm), 1.2" (13mm) and 3/4" (19mm) HB; 3/8" (10mm) and 1/2" (13mm) MNPT Air inlet – 1/4" (6mm) HB	
BODY	Polypropylene/nylon (G71)	
DIAPHRAGM	FFKM	
CHECK VALVES	Polypropylene/nylon (G71)	
CHECK VALVE SPRING	Hasteloy C	
WEIGHT	1.2lb (0.5kg)	

#### **MODELS**

MODEL#	OPEN FLOW	DIAPHRAGM	CHECK VALVE	LIQUID FITTINGS	AIR INLET
G70C002	5 GPM (18.9 LPM)	FFKM	Polypropylene	None	1/4" (6mm) HB brass
G70C162	5 GPM (18.9 LPM)	FFKM	Polypropylene	3/8"-1/2" (10-13mm) HB ST & EL	1/4" (6mm) HB brass
G70C202	5 GPM (18.9 LPM)	FFKM	Polypropylene	3/8"-1/2" (10-13mm) HB ST	1/4" (6mm) HB brass
G70C222	5 GPM (18.9 LPM)	FFKM	Polypropylene	3/4" (19mm) HB ST	1/4" (6mm) HB brass
G70K002	5 GPM (18.9 LPM)	FFKM	Nylon	None	1/4" (6mm) HB brass
G70K162	5 GPM (18.9 LPM)	FFKM	Nylon	3/8"-1/2" (10-13mm) HB ST & EL	1/4" (6mm) HB brass
G70K202	5 GPM (18.9 LPM)	FFKM	Nylon	3/8"-1/2" (10-13mm) HB ST	1/4" (6mm) HB brass
G70K422	5 GPM (18.9 LPM)	FFKM	Nylon	3/8"-1/2" (10-13mm) HB ST	1/4" (6mm) HB brass
G71K002	5 GPM (18.9 LPM)	FFKM	Nylon	None	1/4" (6mm) HB brass
G71K162	5 GPM (18.9 LPM)	FFKM	Nylon	3/8"-1/2" (10-13mm) HB ST & EL	1/4" (6mm) HB brass
G71K202	5 GPM (18.9 LPM)	FFKM	Nylon	3/8"-1/2" (10-13mm) HB ST	1/4" (6mm) HB brass
G71K422	5 GPM (18.9 LPM)	FFKM	Nylon	3/8"-1/2" (10-13mm) HB ST	1/4" (6mm) HB brass

#### **INSTALLATION RECOMMENDATIONS**

- Liquid inlet port must be equal to or larger than the liquid outlet port
- Rubber grommets are provided for secure snug fit on mounting. All four mouting holes should be used.

AIR DRIVEN

### **FLOJET®**

#### **G57 Series Dual High Flow**







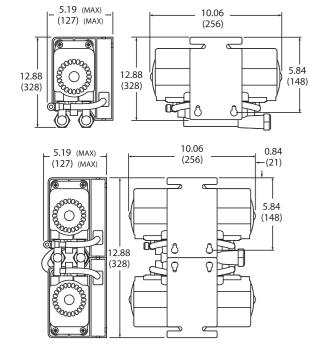






### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).

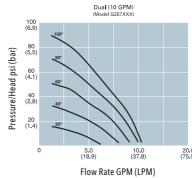


#### **FOR INTERNATIONAL & US MARKETS**

#### **FEATURES**

- Flows to 10 GPM (38 LPM)
- · Chemically resistant polypropylene housings with FKM and EP/PP blend
- Easy installation with 1/2" (13mm) dual and 3/4" (19mm) quatro pump manifolds
- Duplex diaphragm design
- Patented shuttle valves eliminates stalling
- Compact size

#### **PERFORMANCE**



\*Indicates air inlet pressure.

#### **MODELS**

MODEL#	CE	OPEN FLOW	DIAPHRAGM	LIQUID FITTINGS	AIR INLET
G257301A	Yes	10 GPM (38 LPM)	FKM	1/2" (13mm) NPFT	1/4" (6mm) HB ST
G257302A	Yes	10 GPM (38 LPM)	FKM	1/2" (13mm) NPFT	1/4" (6mm) QD EL
G257501A	Yes	10 GPM (38 LPM)	EP/PP blend	1/2" (13mm) NPFT	1/4" (6mm) HB ST
G257502A	Yes	10 GPM (38 LPM)	EP/PP blend	1/2" (13mm) NPFT	1/4" (6mm) QD EL
G577000A*	Yes	5 GPM (19 LPM)	EP/PP blend	None	None
G578000A**	Yes	5 GPM (19 LPM)	FKM	None	None

- \* EP/PP blend reverse flow for dual G57
- \*\* FKM reverse flow for dual G57

#### **SPECIFICATIONS**

PUMP DESIGN	Positive displacement double diaphragm
MAX FLOW RATE (DUAL)	10 GPM (38 LPM)
PRESSURE	20-100 psi (1.4-6 bar)
SELF-PRIMING	15' (4.5m) dry, 20' (6.1m) wet
CHECK VALVE	Polypropylene
LIQUID TEMPERATURE RANGE	40°F (4.4°C) to 140°F (60°C)
MAX LIQUID INLET PRESSURE	30 psi (2.1 bar)
AIR SUPPLY PRESSURE	20-100 psi (1.4-6 bar)
MAX NOISE	90 db

#### N5100 Series





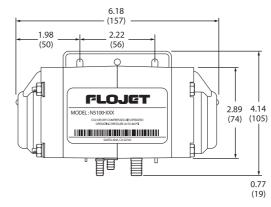






#### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).





#### **FOR INTERNATIONAL & US MARKETS**

Flojet air-operated diaphragm pumps offer excellent self-priming capability. Pumps can be located above the supply tank. A suction-side foot valve is recommended for best operation. Liquid pressure is regulated by supply air pressure. No bypass or pressure relief plumbing is necessary. Choice of EP/PP blend, Buna, or FKM elastomers provide a wide range of chemical compatibility. Quick disconnect liquid and gas port fittings provide easy installation.

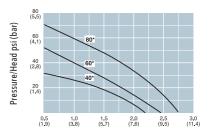
#### **FEATURES**

- Compact design with plug-in hose connections for quick installation
- No pressure relief or bypass plumbing required
- · Variety of elastomers to ensure chemical compatibility
- Excellent self-priming; pump may be located

• Variable capacity from zero to the maximum flow

above the liquid level

#### **PERFORMANCE**



Flow GPM (LPM) \*Indicates air inlet pressure in psi.

#### **MODELS**

MODEL#	CE	OPEN FLOW	DIAPHRAGM	CHECK VALVE
N5100010	Yes	2.5 GPM (9.5 LPM)	Buna	Buna
N5100020	Yes	2.5 GPM (9.5 LPM)	FKM	FKM
N5100040	Yes	2.5 GPM (9.5 LPM)	EP/PP blend	EP/PP blend
N5100050	Yes	2.5 GPM (9.5 LPM)	Buna/PP blend	Buna/PP blend
N5100500*	Yes	2.5 GPM (9.5 LPM)	EP/PP blend	EP/PP blend

<sup>\*</sup>Teflon O-ring

#### **SPECIFICATIONS**

PUMP DESIGN	Air-operated positive displacement double diaphragm pump	
MAX FLOW RATE	2.5 GPM (9.5 LPM)	
PRESSURE	20-75 psi (1.4-5.5 bar)	
SELF-PRIMING	28' (8.5m) dry, 32' (9.8m) wet	
PORTS	Liquid - 3/8" (10mm), Air - 1/4" (6mm)	
LIQUID FITTINGS	3/8" (10mm) HB ST	
AIR INLET/OUTLET	1/4" (6mm) HB ST	
WETTED PARTS	Buna, EP/PP blend, buna/PP blend or FKM for diaphragms and valves; acetal copolymer for housing	
GAS/AIR CONSUMPTION	Air supply must be oil-free and dry 40 psi at 1 GPM - 0.5 CFM, 60 psi at 1 GPM - 0.6 CFM, 80 psi at 1 GPM - 0.8 CFM	

IOM #81000-363

Diaphragm Pumps 03

**ACCESSORIES & FITTINGS** 

### **FLOJET®**

#### **Permanent Magnet Motors**













#### **FOR INTERNATIONAL & US MARKETS**

Flojet manufactures a wide range of 3" (76mm) diameter permanent magnet motors. These are designed as a more cost-effective alternative to larger series wound or induction-type motors. They also offer flexibility of speed in the range of 1000 to 5000 rpm. Low heat rise and high efficiency ensures long and reliable service life. The ease with which these motors can be adapted to any application is enhanced by the availability of various motor lengths and shaft configurations. The fact that the motors are bidirectional increases their versatility. Most of our motors have the appropriate agency approvals including UL, CSA and CE.

#### **FEATURES**

- Highly efficient permanent magnet design
- Combines advantages of low amp draw heat rise with high torque and low speed
- Diamond-turned commutator
- Delivers up to 1/8 HP in compact 3" (76mm) diameter
- 6V, 12V, 24V, 32V, 36V, 115V, 230V and 240V AC or DC
- Lightweight, double insulated armatures

- High starting torque up to 600% of rated torque
- Speed control capability
- Available with internal solid state rectifier (AC models only)
- Instant reversibility (DC voltages)
- Thermo protection available
- Dynamic braking capability
- UL recognized (115V AC models only)
- Partial or full suppression available
- with CE certification

#### **MODELS**

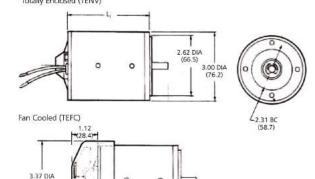
STACK LENGTH (APPROX.)	A	МНР
1/2" (13mm)	2.9" (73mm)	20
7/8" (22mm)	3.25" (83mm)	50
1-1/4" (32mm)	3.7" (94mm)	75
1-7/8" (47mm)	4.4" (112mm)	100

#### **SPECIFICATIONS**

MOTOR DESIGN	Permanent magnet
VOLTAGE	6V-230V DC or rectified AC
SIZE	3" (76mm) diameter
STACK LENGTH	1/2"-2" (13mm-51mm)
MAX HORSEPOWER	1/8 HP
DUTY CYCLE	Continuous or intermittent
SPEED	1100-5000 rpm
INSULATION Class B standard	
BEARINGS	Sleeve or ball bearing
ENCLOSURE	Totally enclosed; totally enclosed, fan-cooled

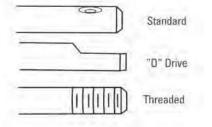
#### Totally Enclosed (TENV)

**DIMENSIONAL DRAWINGS** 



Unless otherwise stated, dimensions are in inches and (mm).

#### **MOTOR SHAFT CONFIGURATION**



#### WARNING

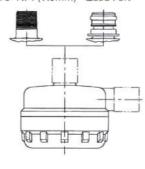
Explosion hazard. Motor can spark. Do not use where flammable vapors are present.

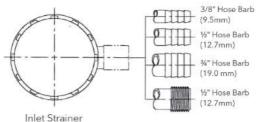
### 1720/1740/1745 Series Inlet Strainers

#### **DIMENSIONAL DRAWINGS**

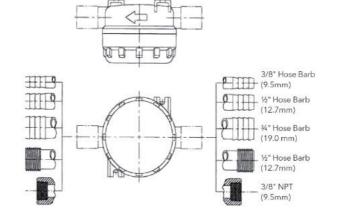
Unless otherwise stated, dimensions are in inches and (mm).

3/8" NPT (9.5mm) Quad Port





(Plugs into Quad pump port)



#### **FOR INTERNATIONAL & US MARKETS**

#### **FEATURES**

- Low profile design for space-saving installation
- Very strong, reinforced plastic base with clear cover
- Wide variety of port configurations from 3/8" (10mm) to 3/4" (19mm)

#### **MODELS**

MODEL#	DESCRIPTION
01720-000	3/4" (19mm) x 3/4" (19mm) hose barb SS 20M
01720-002	1/2" (13mm) x 1/2" (13mm) hose barb SS 20M
01720-023	3/8" (10mm) HB x 3/8" (10mm) NPTM 90° SS 20M
01720-102	1/2" (13mm) x 1/2" (13mm) hose barb PP 20M
01720-103	3/8" (10mm) x 3/8" (10mm) hose barb PP 20M
01720-112	1/2" (13mm) x quad port 90° PP 20M
01720-123	3/8" (10mm) HB x 3/8" (10mm) NPTM 90° PP 20M
01720-375	3/8" (10mm) NPTF x 3/8" (10mm) NPTF SS 20M
01740-000	3/4" (19mm) x 3/4" (19mm) hose barb SS 40M
01740-002	1/2" (13mm) x 1/2" (13mm) hose barb SS 40M
01740-003	3/8" (10mm) x 3/8" (10mm) hose barb SS 40M
01740-004	1/2" (13mm) x 1/2" (13mm) SS 40M
01740-010	3/4" (19mm) x quad port 90° SS 40M
01740-012	1/2" (13mm) x quad port 90° SS 40M
01740-014	1/2" (13mm) x quad port 90° SS 40M
01740-300	Snap Fit Strainer Quick Connect male X Quad Port
01740-375	3/8" (10mm) NPTF x 3/8" (10mm) NPTF SS 40M
017450-000S	Strainer inline 3/4" (19mm) HB x 3/4" (19mm) HB SS 40M PETG VIT
017450-10S	Strainer inline 3/4" (19mm) HB x quad port 90° 40M PETG VIT
017450-12S	Strainer inline 1/2" (13mm) HB x quad port 90° 40M PETG VIT
017450-23S	Strainer inline 3/8" (10mm) HB x 3/8" (10mm) MNPT SS 40M PETG VIT

SS – Stainless Steel PP – Polypropylene M – Mesh

BASE	Polypropylene, black		
COVER	Polysulfane, smoke-tinted		
SCREEN	Stainless steel - 20 and 40 mesh Polypropylene - 20 mesh		
O-RINGS	Buna-N FDA compound		
MAX TEMPERATURE	160°F (70°C)		
DIMENSIONS	2-3/4" (70mm) diameter x 2-1/4" (56mm) high 4-3/4" (121mm) max port to port (3/4" hose barb) plug-in style, 3-3/4" (96mm) max length		

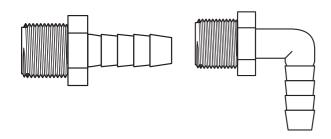
ACCESSORIES & FITTINGS



### **Electric Pump Fittings**

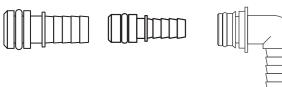
#### **NYLON BARBED STRAIGHT/ELBOW**

For use with all Duplex II Series pumps (3/8" [10mm] NPT only).



#### PLASTIC (POLYPROPYLENE, EPDM)\* INLETS & OUTLETS

For use with all Triplex, Quad and G57 Series pumps.



\* Other elastomers available.

#### **FOR INTERNATIONAL & US MARKETS**

#### **MODELS**

PART#(STRAIGHT)	PART # (ELBOW)	DESCRIPTION
91010-032	91010-033	3/8" (10mm) NPTM x 1/4" (6mm) barb
91010-004	91010-003	1/4" (6mm) NPTM x 3/8" (10mm) barb
91010-002	91010-001	3/8" (10mm) NPTM x 3/8" (10mm) barb
91010-034	91010-025	1/4" (6mm) NPTM x 3/8" (10mm) barb
91010-006	91010-005	3/8" (10mm) NPTM x 1/2" (13mm) barb
91010-053	91010-052	1/4" (6mm) NPTM x 1/4" (6mm) barb
91006-477A	N/A	Wire harness 9' (3m) with fuse rocker switch and in-line connector

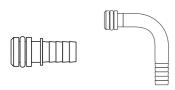
#### **MODELS**

PART#(STRAIGHT)	PART # (ELBOW)	DESCRIPTION
20381-000	20381-008	Quad port x 1/2" (13mm) - 14 male straight
20381-002	20381-009	Quad port x 1/2" (13mm) hose barb
20381-006	20381-010	Quad port x 3/4" (19mm) hose barb
20381-007	N/A	Quad port x garden hose adapter

### **Gas Pump Fittings**

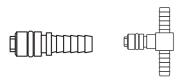
#### **STAINLESS STEEL INLETS & OUTLETS (LIQUID FITTINGS)**

For use with all 5100 Series pumps.



#### BRASS CO<sub>2</sub>/AIR INLETS WITH SHUT-OFF VALVE (AIR FITTINGS)

For use with all 5100 and G Series pumps.



#### PLASTIC (CELCON) CO<sub>2</sub>/AIR INLETS

For use with all 5100 and G Series pumps.





#### **MODELS**

PART#(STRAIGHT)	PART#(ELBOW)	DESCRIPTION
20324-030	20607-100	1/4" (6mm) hose barb
20325-030	20608-100	3/8" (10mm) hose barb
20606-100	N/A	1/2" (13mm) hose barb

#### **MODELS**

PART#	DESCRIPTION
1510-000	1/4" (6mm) hose barb, straight
1520-000	1/4" (6mm) hose barb, tee
1521-000	1/4" (6mm) hose barb, elbow

PART#	DESCRIPTION
20325-033	1/4" (6mm) hose barb, straight



82

## 04 Flexible Impeller Pumps





#### Introduction

There are probably few parts of the world where the Xylem Jabsco family of products is not in use or where our brands are not known.

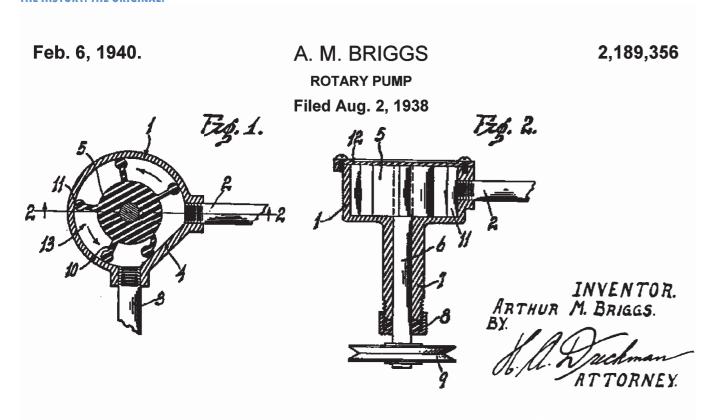
The reason is simple: "Make good fit-for-purpose products and you will get a good name."

This catalog is designed to help you understand the basics of a flexible impeller pump (FIP) and supply you with a quick reference guide, enabling you to choose the correct pump for the application.

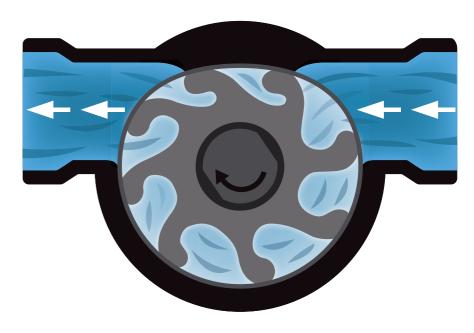
#### **JACK ART BRIGGS STREETER COMPANY**

- To come up with the name Jabsco, these inventors used the first letter from each of their names and added the "co", to be Jabsco. Jabsco pump company formed in Burbank, California.
- First pump designed in 1938.
- The patent for the flexible impeller was issued in 1938.
- Designed in response to a specific customer requirement for condensate removal from air conditioning systems.
- The FIP principle has been applied to a diverse range of applications such as engine cooling systems, bulk milk transfer, food processing and industrial applications.

#### THE HISTORY. THE ORIGINAL.



#### Flexible Impeller Product Range



#### **HOW A FLEXIBLE IMPELLER WORKS**

- As the impeller rotates, the impeller blades leaving the cam straighten, causing the cell volume to increase. This causes a partial vacuum which allows atmospheric pressure to push the liquid into the pump.
- The blades form an almost perfect seal, which also allows the impeller to "pump" air.
- The impeller continues to rotate, transferring the fluid in the cells that now have constant volume.
- Now the vanes reach the other side of the cam, and the cell volume decreases which forces the fluid out through the discharge port.
- This happens thousands of times per minute, producing a continuous, even flow.

#### **FEATURES**

- Self-priming: will lift fluid up to 22' (6.7m) when wet
- Will not air lock: pump will continue to operate even when air passes through the system
- Viscous liquids handling: will easily pump thin or thick liquids
- Pulsation-free flow: delivers a smooth, even flow
- Non-shear action: will handle delicate fluids
- Hard solid handling: passes hard solids or abrasives with minimal wear or damage
- Few moving parts: easy to maintain, so less downtime
- Compact: will provide high flows from a small-size pump
- Competitive: lower-cost installation and less maintenance than other competing pump types

#### **SPECIFICATIONS**

PUMP DESIGN Pedestal, close-coupled, pump head kits  50/60Hz - 12V, 24V DC and 115V, 230V AC  MAX FLOW RATE 185 GPM (700 LPM)  MAX PRESSURE 60 psi (4.1 bar)  PORTS Hose fitting, internal-external NPT/BSP, clamp, ACME  BODY Epoxy, phenolic, bronze, stainless steel  Buna, nitrile, FKM lip seals, mechanical carbon-on-ceramic, tungsten carbide  VISCOSITY 1-50,000 centiPoise (Cp)  IMPELLER Neoprene, 3A neoprene, nitrile, 3A nitrile, FKM, 3A EPDM  IMPELLER RATINGS Standard, medium, high pressure		
MAX FLOW RATE  185 GPM (700 LPM)  60 psi (4.1 bar)  PORTS  Hose fitting, internal-external NPT/BSP, clamp, ACME  BODY  Epoxy, phenolic, bronze, stainless steel  Buna, nitrile, FKM lip seals, mechanical carbon-on-ceramic, tungsten carbide  VISCOSITY  1-50,000 centiPoise (Cp)  Neoprene, 3A neoprene, nitrile, 3A nitrile, FKM, 3A EPDM	PUMP DESIGN	Pedestal, close-coupled, pump head kits
MAX PRESSURE  60 psi (4.1 bar)  Hose fitting, internal-external NPT/BSP, clamp, ACME  BODY  Epoxy, phenolic, bronze, stainless steel  Buna, nitrile, FKM lip seals, mechanical carbon-on-ceramic, tungsten carbide  VISCOSITY  1-50,000 centiPoise (Cp)  IMPELLER  Neoprene, 3A neoprene, nitrile, 3A nitrile, FKM, 3A EPDM	VOLTAGE	50/60Hz - 12V, 24V DC and 115V, 230V AC
PORTS  Hose fitting, internal-external NPT/BSP, clamp, ACME  BODY  Epoxy, phenolic, bronze, stainless steel  Buna, nitrile, FKM lip seals, mechanical carbon-on-ceramic, tungsten carbide  VISCOSITY  1–50,000 centiPoise (Cp)  IMPELLER  Neoprene, 3A neoprene, nitrile, 3A nitrile, FKM, 3A EPDM	MAX FLOW RATE	185 GPM (700 LPM)
Clamp, ACME  BODY  Epoxy, phenolic, bronze, stainless steel  Buna, nitrile, FKM lip seals, mechanical carbon-on-ceramic, tungsten carbide  VISCOSITY  1–50,000 centiPoise (Cp)  IMPELLER  Neoprene, 3A neoprene, nitrile, 3A nitrile, FKM, 3A EPDM	MAX PRESSURE	60 psi (4.1 bar)
Buna, nitrile, FKM lip seals, mechanical carbon-on-ceramic, tungsten carbide  VISCOSITY  1–50,000 centiPoise (Cp)  Neoprene, 3A neoprene, nitrile, 3A nitrile, FKM, 3A EPDM	PORTS	3.
carbon-on-ceramic, tungsten carbide  VISCOSITY  1–50,000 centiPoise (Cp)  IMPELLER  Neoprene, 3A neoprene, nitrile, 3A nitrile, FKM, 3A EPDM	BODY	Epoxy, phenolic, bronze, stainless steel
Neoprene, 3A neoprene, nitrile, 3A nitrile, FKM, 3A EPDM	SEAL	
FKM, 3A EPDM	VISCOSITY	1-50,000 centiPoise (Cp)
IMPELLER RATINGS Standard, medium, high pressure	IMPELLER	
	IMPELLER RATINGS	Standard, medium, high pressure



#### **GAS WARNING**

No pump manufactured by Xylem should be used for gasoline or any fluid with a flash point below 100°F (38°C).

Flexible Impeller Pumps 0

EPOXY / PHENOLIC PLASTIC



#### 12310 Series Phenolic Plastic Flex Pump





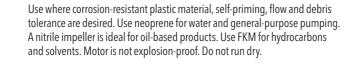












#### **SPECIFICATIONS**



	(011 445)/400 : 1 1 05	
VOLTAGE	60Hz - 115V AC, single phase, non-CE	
MAX FLOW RATE	4 GPM (15.1 LPM)	
MAX PRESSURE	17 psi (1.2 bar), 39' (11.9m) of water	
SELF-PRIMING	5-7' (1.5-2.1m) dry, 10-14' (3-4.3m) wet	
PORTS	3/8" (10mm) NPTF, 3/4" (19mm) male garden hose thread	
MOTOR	PMDC rectified, intermittent duty	
BODY	Phenolic	
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 180°F (82°C) Nitrile - 50°F (10°C) to 180°F (82°C)	
SHAFT	Stainless steel	
SEAL	Buna lip type	
IMPELLER	Neoprene, nitrile	
DIMENSIONS	3-7/16" high x 5" long x 7" wide (87mm x 126mm x 177mm)	
WEIGHT	5.8lb (2.6kg)	

#### MODELS

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
12310-0001	No	115V AC	Neoprene	MPU
12310-0003	No	115V AC	Nitrile	MPU

### 3010 Series Epoxy Pedestal Pump

















#### **SPECIFICATIONS**

MAX FLOW RATE	5 GPM (19 LPM)	
PORTS	0.6" (16mm) OD for hose connections	
BODY	Phenolic	
SHAFT	Stainless steel	
SEAL	Lip seal	
BEARINGS	PFTE/graphite	
BRACKET	Plated steel	
IMPELLER	Neoprene, nitrile, FKM	
WEIGHT	0.6lb (0.25kg)	

#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
3010-1011	Yes	N/A	Neoprene	Pedestal

#### 12560 Series Phenolic Plastic Flex Pump













#### **FOR US MARKETS**

Use where corrosion-resistant plastic material, self-priming, flow and debris tolerance are desired. Use neoprene for water and general-purpose pumping. A nitrile impeller is ideal for oil-based products. Use FKM for hydrocarbons and solvents. Motor is not explosion-proof. Do not run dry.

#### **SPECIFICATIONS**

VOLTAGE	12V DC, CE approved
MAX FLOW RATE	4.6 GPM (17.4 LPM)
MAX PRESSURE	8.7 psi (20.1 bar), 20' of water
SELF-PRIMING	1-2' (0.3-0.6m) dry, 2-4' (0.6-1.2m) wet
PORTS	5/8" (16mm) hose barb
MOTOR	PMDC, TENV, thermal overload protected
MOTOR	7A nominal, 10A fuse
<b>BODY</b> Phenolic	
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 160°F (70°C) Nitrile - 50°F (10°C) to 180°F (82°C)
SHAFT	Stainless steel
SEAL	Buna lip type
APPROVALS	Ignition protection
IMPELLER	Neoprene
DIMENSIONS	3-1/4" high x 5" long x 6-1/2" wide (82mm x 126mm x 164mm)
WEIGHT	4.5lb (2kg)

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
12560-0001	Yes	12V DC	Neoprene	MPU





### 12290 Series Phenolic Plastic Flex Pump

















Use where corrosion-resistant phenolic or glass-filled epoxy material, self-priming and debris tolerance are desired. A nitrile impeller is ideal for oil-based products. Use neoprene for water and general-purpose pumping. Use FKM for hydrocarbons and solvents. Long-lasting AC induction motor has no brushes to wear out. Motor is not explosion-proof. Do not run dry.

#### **SPECIFICATIONS**

VOLTAGE	60Hz - 115V AC, single phase, non-CE	
MAX FLOW RATE	5.8 GPM (22 LPM)	
MAX PRESSURE	17 psi (1.2 bar) 39' of water	
SELF-PRIMING	Neoprene - 8-10' (2.4-3.1m) dry, 10-15' (3.1-4.6m) wet	
JELF-FRIMING	Nitrile/FKM - 3-5' (0.9-1.5m) dry, 8-10' (2.4-3.1m) wet	
PORTS	5/8" (16mm) hose barb	
	1/6 HP ODP, 1/4 HP, TENV	
MOTOR	6' (2m) power cord with 2-prong grounded plug	
	Thermal overload protected	
	4.2A full load OD, 3.3A full load TENV	
BODY	Phenolic	
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 180°F (82°C) Nitrile - 50°F (10°C) to 180°F (82°C) FKM - 60°F (16°C) to 180°F (82°C)	
SHAFT	Stainless steel	
SEAL	Buna or FKM lip type	
IMPELLER	Neoprene, nitrile, FKM	
DIMENSIONS	8-3/8" high x 9.7" long x 14.3" wide (211mm x 245mm x 361mm)	
WEIGHT	12lb (5.5kg)	

#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
12290-0001	No	115V AC	Neoprene	MPU
12290-0003	No	115V AC	Nitrile	MPU
12290-0004	No	115V AC	FKM	MPU
12290-0271	No	115V AC	Neoprene	MPU
12290-0273	No	115V AC	Nitrile	MPU
12290-0274	No	115V AC	FKM	MPU

### 17430 Series Epoxy Utility Pump













Use where corrosion-resistant phenolic or glass-filled epoxy material, self-priming and debris tolerance are desired. A nitrile impeller is ideal for oil-based products. Use neoprene for water and general-purpose pumping. Use FKM for hydrocarbons and solvents. Long-lasting AC induction motor has no brushes to wear out. Motor is not explosion-proof. Do not run dry.

#### **SPECIFICATIONS**

VOLTAGE	60Hz - 115V AC, single phase, non-CE		
MAX FLOW RATE	11 GPM (42 LPM)		
MAX PRESSURE	21 psi (1.5 bar) or 50' (15.2m) of head		
SELF-PRIMING	12-15' (3.7-4.6m) dry, 18-22' (5.5-6.7m) wet		
PORTS	1/2" (13mm) NPTF		
	1/2 HP TEFC, AC induction type		
MOTOR	6' (1.8m) power cord with 3-prong grounded plug		
	Thermal overload protected		
	8.8A full load		
BODY	Ероху		
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 180°F (82°C) Nitrile - 50°F (10°C) to 180°F (82°C) FKM - 60°F (16°C) to 180°F (82°C)		
SHAFT	Epoxy sleeve		
SEAL	Mechanical carbon-on-ceramic		
IMPELLER	Nitrile, FKM		
DIMENSIONS	8-3/8" high x 9.7" long x 14.3" wide (211mm x 245mm x 361mm)		
WEIGHT	33.5lb (15.2kg)		

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
17430-0003	No	115V AC	Nitrile	MPU







#### 28250 Series Pedestal Pump & 28260 Series Epoxy Head Kit Pump



















#### **FEATURES**

- Self-primes from dry up to 16.4' (5m)
- Flows up to 18.5 GPM (70 LPM)
- Pressure up to 43.5 psi (3 bar)
- Handles hard or soft solids 0.2" (5mm) maximum diameter
- High-chemical-resistance epoxy plastic
- Non-pulsating flow, proportional
- Handles viscosities up to 10,000 cP
- No metal parts in liquid contact
- Fits IEC standard motor B3/B14, frame 80 (model 28260)

#### **SPECIFICATIONS**

MAX PRESSURE	Standard - 36 psi (2.5 bar) High - 43.5 psi (3 bar)
PORTS	3/4" BSP external thread to BS21 DIN2999
PUMP HEAD	Epoxy thermoset plastic
SHAFT	Epoxy-covered stainless steel, shaft extension
	Carbon/ceramic mechanical face seal
SEAL	Nitrile elastomer
	Optional tungsten carbide/ceramic
	hard-faced mechanical seal
PEADINGS	
BEARINGS	hard-faced mechanical seal  Model 28250 - twin single row, ball type
BEARINGS END COVER	hard-faced mechanical seal  Model 28250 - twin single row, ball type with epoxy-coated, cast iron housing  Model 28260 - uses motor bearings with
	hard-faced mechanical seal  Model 28250 - twin single row, ball type with epoxy-coated, cast iron housing  Model 28260 - uses motor bearings with epoxy-coated, cast iron motor adapter

Pressures over 24.7 psi (1.7 bar) may reduce motor shaft lift.

### 28350 Series Pedestal Pump & 28360 Series Epoxy Head Kit Pump

















#### **FEATURES**

- Self-primes from dry up to 16.4' (5m)
- Flows up to 42.3 GPM (160 LPM)
- Pressure up to 36.25 psi (2.5 bar)
- Handles hard or soft solids 0.2" (5mm) maximum diameter
- Tolerates abrasive wear; replaceable wearplate
- Non-pulsating flow, proportional
- Handles viscosities up to 4,000 cP
- Minimal shear to thixotropic fluids
- Fits IEC standard motor B3/B14, frame 80 (model 28360)







MODEL#	CE	VOLTAGE	IMPELLER	STYLE
28350-2101	Yes	N/A	Neoprene	Pedestal
28350-2103	Yes	N/A	Nitrile	Pedestal
28350-2104	Yes	N/A	FKM	Pedestal
28350-2123	Yes	N/A	Nitrile	Pedestal
28350-2124	Yes	N/A	FKM	Pedestal
28350-2125	Yes	N/A	Sanitary neoprene	Pedestal
28360-2101	Yes	N/A	Nitrile	Head kit
28360-2103	Yes	N/A	FKM	Head kit
28360-2104	Yes	N/A	FKM	Head kit
28360-2204	Yes	N/A	Nitrile	Head kit



EPOXY / PHENOLIC PLASTIC



#### 30510 Series Epoxy Plastic Pedestal & Close-Coupled Flex Pump























Use where single or variable speed operation and plastic-epoxy material is desirable. Self-priming, 8 GPM (30 LPM) flow and debris-tolerant. A nitrile impeller is ideal for oil-based products. Use neoprene for water and generalpurpose pumping. Use FKM for hydrocarbons and most solvents. Optional EPDM standard and high-pressure impeller kits (7614-0002) and (8980-0002) for hygienic applications and some keytone solvents. Use a tungsten carbide seal when pumping highly-corrosive or abrasive fluids. Motor is not explosion-proof.

For pump head-only models (30510-3xxx), select NEMA 56 C-frame C-face motor rated at 3/4 HP at 1750 rpm with appropriate service factor. Motor must handle high-axial loads. Ball bearings locked against axial movement are recommended. Motor must deliver 1.5ft-lbs and 4.3ft-lbs torque minimum in forward and reverse directions respectively. Use only capacitor start motors.

For pedestal mount models (30510-1xxx) operating at 1750 rpm, select a 3/4 HP or 1-1/2 HP motor for standard or high-pressure impellers respectively, with an appropriate service factor. For high-pressure impellers, the motor must supply 3ft-lbs or 6.9ft-lbs of torque minimum for forward and reverse operation respectively.

Rated flow is based on neoprene impeller pumping water. Reduce rated flow 10 percent for nitrile, FKM, and EPDM standard impellers. Reduce rated flow 15 percent for nitrile, FKM and EPDM high-pressure impellers.

#### **SPECIFICATIONS**

VOLTAGE	60Hz - 115V AC, single phase, non-CE		
MAX FLOW RATE	8 GPM (30 LPM)		
MAX PRESSURE	Consult performance chart		
SELF-PRIMING	Neoprene/nitrile/FKM - 7-10' (2.1-3m) dry, 17-22' (5.7-6.7m) wet		
JELF-FRIMING	EPDM - 4-6' (1.2-1.8m) dry, 10-12' (3.1-3.7m) wet		
PORTS	3/4" (19mm) NPTM		
	3/4 HP, TEFC AC induction type		
MOTOR	Intermittent duty, 56 C-frame, C-face		
MOTOR	3-prong grounded plug		
	Thermal overload protected		
BODY	Epoxy plastic		
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 180°F (82°C) Nitrile - 50°F (10°C) to 180°F (82°C) FKM - 60°F (16°C) to 180°F (82°C) EPDM - 45°F (7°C) to 185°F (85°C)		
SHAFT	Epoxy plastic sleeve		
SEAL	Mechanical carbon or tungsten carbide on ceramic		
IMPELLER	Neoprene, nitrile, FKM, EPDM		
DIMENSIONS	Consult data sheet 43000-0516		
WEIGHT	Model 30510-5xxx - 35lb (15.9kg) Model 30510-3xxx - 6.5lb (3kg) Model 30510-1xxx - 4.5lb (2kg)		

#### 30520 Series Epoxy Plastic Pedestal & Close-Coupled Flex Pump



















Use where single or variable speed operation and plastic-epoxy material is desirable. Self-priming, 22 GPM (83 LPM) flow and debris-tolerant. A nitrile impeller is ideal for oil-based products. Use neoprene for water and generalpurpose pumping. Use FKM for hydrocarbons and most solvents. Optional EPDM standard and high-pressure impeller kits (8981-0002) and (8840-0002) for hygienic applications and some keytone solvents. Use a tungsten carbide seal when pumping highly-corrosive or abrasive fluids. Motor is not explosion-proof.

For pump head-only models (30520-3xxx), select NEMA 145 TC-frame C-face motor rated at 1-1/2 HP at 1750 rpm with appropriate service factor. Motor must handle high-axial loads. Front ball bearing locked against axial movement is recommended. Motor must deliver 4.8ft-lbs and 11.2ft-lbs torque minimum in forward and reverse directions, respectively. Use only capacitor start motors.

For pedestal mount models (30520-1xxx) operating at 1750 rpm, select a 1-1/2 HP or 3 HP motor for standard or high-pressure impellers respectively, with an appropriate service factor. For high-pressure impellers, the motor must supply 7.9ft-lbs or 16.3ft-lbs of torque minimum for forward and reverse operation respectively.

Rated flow is based on neoprene impeller pumping water. Reduce rated flow 10 percent for nitrile, FKM, and EPDM standard impellers. Reduce rated flow 15 percent for nitrile, FKM and EPDM high-pressure impellers.

VOLTAGE	60Hz - 115V and 230V AC, single phase, non-CE
MAX FLOW RATE	22 GPM (83 LPM)
MAX PRESSURE	Standard - 30 psi (2.1 bar) or 70' (21.3m) of head High - 60 psi (4.2 bar) or 138' (42.1m) of head
SELF-PRIMING	Neoprene/nitrile/FKM - 7-10' (2.1-3m) dry, 17-22' (5.7-6.7m) wet
	EPDM - 4-6' (1.2-1.8m) dry, 10-12' (3.1-3.7m) wet
PORTS	1" (25mm) NPTM
	1-1/2 HP, capacity start, TEFC,
MOTOR	C-face, H14 TC-frame
MOTOR	6' (1.8m) power cord with 3-prong grounded plug
	Thermal overload protected
BODY	Epoxy plastic
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 180°F (82°C) Nitrile - 50°F (10°C) to 180°F (82°C) FKM - 60°F (16°C) to 180°F (82°C) EPDM - 45°F (7°C) to 185°F (85°C)
SHAFT	Epoxy plastic sleeve
SEAL	Mechanical carbon or tungsten carbide on ceramic
IMPELLER	Neoprene, nitrile, FKM, optional EPDM
	Pump and motor - 9.1" high x 8.9" long x 16.25" wide (230mm x 224mm x 410mm)
DIMENSIONS	Pump head - 6.6" high x 6.6" long x 6.8" wide (167mm x 167mm x 171mm)
	Pedestal mount - 4.75" high x 4.9" long x 9.6" wide (120mm x 123mm x 243mm)
WEIGHT	Pump and motor - 54.5lb (24.7kg) Pump head - 10.5lb (4.8kg) Pedestal mount - 7lb (3.2kg)





#### 17830 Reversible DC Water Puppy













#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
17830-0012	No	12V DC	Nitrile	MPU
17830-0024	No	24V DC	Nitrile	MPU

#### FOR INTERNATIONAL MARKETS

Especially suited for viscous fluids and engine oil transfer where self-priming and 3 GPM (11.4 LPM) flow is required. Pump oil from crankcase to storage container, and from storage container to waste container automatically using the manual flow reverse switch. No need to remove or reattach hoses to reverse oil flow direction. Oil temperature should be 100°F (38°C) to 140°F (60°C). Use 12V DC from vehicle battery. Do not run dry.

#### **SPECIFICATIONS**

VOLTAGE	12V DC
MAX FLOW RATE	3 GPM (11.4 LPM)
MAX PRESSURE	8.7 psi (0.6 bar) or 20' (6.1m) of lift
SELF-PRIMING	3-4' (1-1.2m) dry, 15-20' (4.6-6.1m) wet
PORTS	3/8" (10mm) NPTF
MOTOR	PMDC, TENV with manual reverse switch
MOTOR	10A nominal, 15A fuse
BODY	Bronze
LIQUID TEMPERATURE RANGE	Nitrile - 45°F (7°C) to 180°F (82°C)
SHAFT	Stainless steel
SEAL	Buna lip type
CERTIFICATIONS	CE
IMPELLER	Nitrile
DIMENSIONS	4.4" high x 3.25" long x 7.9" wide (113mm x 83mm x 200mm)
WEIGHT	9lb (4.1kg)

#### 18660 DC Water Puppy



















#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
18660-0121	No	12V DC	Neoprene	MPU
18660-0123	No	12V DC	Nitrile	MPU

For general transfer pumping where self-priming, 6.3 GPM (24 LPM) flow, and debris tolerance are required. Use optional oil-resistant nitrile impeller 6303-0003 if oil or diesel fuel are present. Do not run dry.

#### **SPECIFICATIONS**

VOLTAGE	12V DC, non-CE
MAX FLOW RATE	6.3 GPM (24 LPM)
MAX PRESSURE	8.7 psi (0.6 bar) or 20' (6.1m) of lift
SELF-PRIMING	2-4' (0.6-1.2m) dry, 15-20' (4.6-6.1m) wet
PORTS	1.2" (13mm) NPTF, 3/4" (19mm) male garden hose adapter
MOTOR	PMDC, TENV
MOTOR	8A nominal, 15A fuse
BODY	Bronze
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 180°F (82°C)
SHAFT	Stainless steel
SEAL	Nitrile lip type
IMPELLER	Neoprene or nitrile
DIMENSIONS	3.4" high x 4.75" long x 6.5" wide (86mm x 121mm x 165mm)
WEIGHT	4.5lb (2kg)

#### 18670 Commercial Duty DC Water Puppy













The Commercial Duty Water Puppy has 25 percent more flow than the standard model and a heavy-duty PMDC motor. For general transfer pumping where self-priming, 8 GPM (30.4 LPM) flow and debris tolerance are required. Oil-resistant nitrile impeller is standard. Do not run dry.

#### **SPECIFICATIONS**

VOLTAGE         12V or 24V DC, non-CE           MAX FLOW RATE         8 GPM (30.4 LPM)           MAX PRESSURE         8.7 psi (0.6 bar) or 20' (6.1m) of lift           SELF-PRIMING         4-6' (1.2-1.8m) dry, 15-20' (4.6-6.1m) wet           PORTS         1.2" (13mm) NPTF and 1" (25mm) hose barb, 3/4" (19mm) male garden hose adapter           PMDC, TENV           AMP draw 11.5A at 12V with 20A fuse, 5A at 24V with 10A fuse           BODY         Bronze           LIQUID TEMPERATURE RANGE         Nitrile - 50°F (10°C) to 180°F (82°C)           SHAFT         Stainless steel 316           SEAL         Lip type           IMPELLER         Nitrile           DIMENSIONS         3" high x 4.75" long x 6.9" wide (76mm x 120mm x 175mm)           WEIGHT         6lb (2.7kg)		
MAX PRESSURE         8.7 psi (0.6 bar) or 20' (6.1m) of lift           SELF-PRIMING         4-6' (1.2-1.8m) dry, 15-20' (4.6-6.1m) wet           PORTS         1.2" (13mm) NPTF and 1" (25mm) hose barb, 3/4" (19mm) male garden hose adapter           PMDC, TENV           AMP draw 11.5A at 12V with 20A fuse, 5A at 24V with 10A fuse           BODY         Bronze           LIQUID TEMPERATURE RANGE         Nitrile - 50°F (10°C) to 180°F (82°C)           SHAFT         Stainless steel 316           SEAL         Lip type           IMPELLER         Nitrile           DIMENSIONS         3" high x 4.75" long x 6.9" wide (76mm x 120mm x 175mm)	VOLTAGE	12V or 24V DC, non-CE
SELF-PRIMING         4-6' (1.2-1.8m) dry, 15-20' (4.6-6.1m) wet           PORTS         1.2" (13mm) NPTF and 1" (25mm) hose barb, 3/4" (19mm) male garden hose adapter           PMDC, TENV           AMP draw 11.5A at 12V with 20A fuse, 5A at 24V with 10A fuse           BODY         Bronze           LIQUID TEMPERATURE RANGE         Nitrile - 50°F (10°C) to 180°F (82°C)           SHAFT         Stainless steel 316           SEAL         Lip type           IMPELLER         Nitrile           DIMENSIONS         3" high x 4.75" long x 6.9" wide (76mm x 120mm x 175mm)	MAX FLOW RATE	8 GPM (30.4 LPM)
1.2" (13mm) NPTF and 1" (25mm) hose barb, 3/4" (19mm) male garden hose adapter	MAX PRESSURE	8.7 psi (0.6 bar) or 20' (6.1m) of lift
barb, 3/4" (19mm) male garden hose adapter  PMDC, TENV  AMP draw 11.5A at 12V with 20A fuse, 5A at 24V with 10A fuse  BODY  Bronze  LIQUID TEMPERATURE RANGE Nitrile - 50°F (10°C) to 180°F (82°C)  SHAFT Stainless steel 316  SEAL Lip type  IMPELLER  Nitrile  DIMENSIONS  3" high x 4.75" long x 6.9" wide (76mm x 120mm x 175mm)	SELF-PRIMING	4-6' (1.2-1.8m) dry, 15-20' (4.6-6.1m) wet
MOTOR  AMP draw 11.5A at 12V with 20A fuse, 5A at 24V with 10A fuse  BODY  Bronze  LIQUID TEMPERATURE RANGE Nitrile - 50°F (10°C) to 180°F (82°C)  SHAFT  Stainless steel 316  SEAL Lip type  IMPELLER Nitrile  DIMENSIONS  3" high x 4.75" long x 6.9" wide (76mm x 120mm x 175mm)	PORTS	barb, 3/4" (19mm) male garden hose
AMP draw 11.5A at 12V with 20A fuse, 5A at 24V with 10A fuse  BODY  Bronze  LIQUID TEMPERATURE RANGE  Nitrile - 50°F (10°C) to 180°F (82°C)  SHAFT  Stainless steel 316  Lip type  IMPELLER  Nitrile  3" high x 4.75" long x 6.9" wide (76mm x 120mm x 175mm)		PMDC, TENV
SHAFT Stainless steel 316  SEAL Lip type IMPELLER Nitrile 3" high x 4.75" long x 6.9" wide (76mm x 120mm x 175mm)	MOTOR	
SHAFT         Stainless steel 316           SEAL         Lip type           IMPELLER         Nitrile           DIMENSIONS         3" high x 4.75" long x 6.9" wide (76mm x 120mm x 175mm)	BODY	Bronze
SEAL         Lip type           IMPELLER         Nitrile           DIMENSIONS         3" high x 4.75" long x 6.9" wide (76mm x 120mm x 175mm)	LIQUID TEMPERATURE RANGE	Nitrile - 50°F (10°C) to 180°F (82°C)
IMPELLER         Nitrile           DIMENSIONS         3" high x 4.75" long x 6.9" wide (76mm x 120mm x 175mm)	SHAFT	Stainless steel 316
3" high x 4.75" long x 6.9" wide (76mm x 120mm x 175mm)	SEAL	Lip type
(76mm x 120mm x 175mm)	IMPELLER	Nitrile
WEIGHT 6lb (2.7kg)	DIMENSIONS	9
	WEIGHT	6lb (2.7kg)





MODEL#	CE	VOLTAGE	IMPELLER	STYLE
18670-0123	No	12V DC	Nitrile	MPU
18670-0943	No	24V DC	Nitrile	MPU











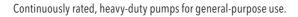












#### **FEATURES**

- Simple design means fewer wearing parts
- 11.6 GPM (44 LPM) output at 10' (3m) head
- Self-priming to 8' (2.4m)

#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
23610-3003	Yes	12V DC	Nitrile	MPU
23610-3103	Yes	24V DC	Nitrile	MPU

#### 23620 Mini Puppy



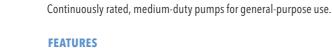












- Simple design means fewer wearing parts
- 1.6 GPM (6 LPM) output at 10' (3m) head
- Self-priming to 5' (1.5m)

#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
23620-4003	Yes	12V DC	Nitrile	MPU
23620-4103	Yes	24V DC	Nitrile	MPU

#### 23670 Junior Puppy





















Continuously rated, medium-duty pumps for general-purpose use.

#### **FEATURES**

- Presence of small debris is no problem to these bronze-bodied, flexible impeller pumps
- 4.1 GPM (15.5 LPM) output at 16' (5m) of head
- Simple design means fewer wearing parts
- Self-priming up to 8' (2.5m)

#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
23670-4003	Yes	12V DC	Nitrile	MPU
23670-4103	Yes	24V DC	Nitrile	MPU

### 23920 Extended Run Dry Utility Puppy 2000/3000













Continuously rated, medium-duty pumps for general-purpose use.

#### **SPECIFICATIONS**

VOLTAGE	12V DC, CE-approved
MAX FLOW RATE	2000 - 8 GPM (30 LPM) 3000 - 11 GPM (42 LPM)
MAX PRESSURE	8 psi (0.55 bar) or 19' (5.8m) of lift
SELF-PRIMING	Model 2000 - 3-4' (0.9-1.2m) dry Model 3000 - 6-8' (1.8-2.4m) dry
PORTS	3/4" (19mm) NPTF or BSP
MOTOR	Permanent magnet DC 12/24V
BODY	Bronze
LIQUID TEMPERATURE RANGE	45°F (7°C) to 180°F (82°C)
SHAFT	Stainless steel
SEAL	Model 2000 - lip seal, nitrile Model 3000 - mechanical seal, carbon, ceramic, nitrile
IMPELLER	Nitrile
DIMENSIONS	Model 2000 - 4.3" high x 7" long x 4.9" wide (110mm x 121mm x 124mm)
DIMENSIONS	Model 3000 - 4.3" high x 8.5" long x 4.9" wide (110mm x 179mm x 124mm)
WEIGHT	Model 2000 - 8.2lb (4kg) Model 3000 - 9.7lb (3.4kg)

#### **MODEL 2000**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
23920-2423	Yes	12V DC	Nitrile	BSP
23920-2523	Yes	24V DC	Nitrile	BSP
23920-9423	Yes	12V DC	Nitrile	NPT
23920-9523	Yes	24V DC	Nitrile	NPT

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
23920-2223	Yes	12V DC	Nitrile	BSP
23920-2323	Yes	24V DC	Nitrile	BSP
23920-9223	Yes	12V DC	Nitrile	NPT
23920-9323	Yes	24V DC	Nitrile	NPT





#### 18610 Bronze Utility Pump













For general transfer pumping where self-priming, 6 GPM (22.8 LPM) flow, debris tolerance and portable 115V AC operation is desired. Choice of impeller materials. Use nitrile for oil-based products. Use FKM for hydrocarbons and solvents. Use neoprene for water and general-purpose pumping. Long-lasting AC induction motor has no brushes to wear out. Do not pump gasoline or other flammable liquids. Do not run dry. Motor is not explosion-proof. For continuous operation at 75°F (24°C), do not exceed 15 psi (1 bar) outlet pressure or 38' (11.6m) of lift.

#### **SPECIFICATIONS**

VOLTAGE	60Hz - 115V AC, single phase, non-CE
MAX FLOW RATE	6 GPM (22.8 LPM)
MAX PRESSURE	ODF - 13 psi (0.9 bar) or 30' (9.1m) of head TENV - 17 psi (1.2 bar) or 39' (12m) of head
SELF-PRIMING	4-6' (1.2-1.8m) dry, 16-20' (4.9-6.1m) wet
PORTS	1/2" (13mm) NPTF, 3/4" (19mm) male garden hose adapter
	1/4 HP, non-vented
MOTOR	8' (2.4m) power cord with 3-prong grounded plug
	Thermal overload protection
BODY	Bronze
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 180°F (82°C) Nitrile - 50°F (10°C) to 180°F (82°C) FKM - 60°F (15°C) to 180°F (82°C)
SHAFT	Stainless steel 316
SEAL	Neoprene lip type
IMPELLER	Neoprene
DIMENSIONS	9" high x 7" long x 7-1/4" wide (229mm x 178mm x 184mm)
WEIGHT	12lb (5.5kg)

#### **MODELS**

See page 128 for model numbers.

### 11810 Bronze AC Utility Pump













For general transfer pumping where self-priming, 10 GPM (38 LPM) flow, debris tolerance and portable 115V AC operation is desired. Use nitrile for oil-based products. Use neoprene for water and general-purpose pumping. Do not run dry. Motor is not explosion-proof.

VOLTAGE	60Hz - 115V AC, single phase, non-CE
MAX FLOW RATE	10 GPM (38 LPM)
MAX PRESSURE	17 psi (1.2 bar) or 39' (12m) of head
SELF-PRIMING	8-10' (2.4-3m) dry, 16-20' (4.9-6.1m) wet
PORTS	1/2" (13mm) NPTF and 3/4" (19mm) male garden hose thread
	1/3 HP, TEFC or ODP AC induction type
MOTOR	8' (2.4m) power cord with 3-prong grounded plug
	Thermal overload protection
	7A nominal, 10A fuse
BODY	Bronze
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 180°F (82°C)
	Nitrile - 50°F (10°C) to 180°F (82°C)
SHAFT	Nitrile - 50°F (10°C) to 180°F (82°C) Stainless steel 316
SHAFT SEAL	, , , , , , , , , , , , , , , , , , , ,
	Stainless steel 316
SEAL	Stainless steel 316 Nitrile lip type
SEAL IMPELLER	Stainless steel 316  Nitrile lip type  Nitrile  7-3/4" high x 7-1/4" long x 10-1/2" wide





#### 6050 Bronze AC Utility Pump













#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
6050-0003	No	115V AC	Nitrile	MPU/ODP
6050-0013	No	115V AC	Nitrile	MPU/TEFC

For general transfer pumping using 115V AC power where self-priming, 23 GPM (87 LPM) flow and debris tolerance are required. Oil-resistant nitrile impeller is standard. Do not run dry.

#### **SPECIFICATIONS**

VOLTAGE	60Hz - 115V and 230V AC, single phase, non-CE
MAX FLOW RATE	23 GPM (87 LPM)
MAX PRESSURE	26 psi (1.8 bar) or 60' (18.2m) of lift
SELF-PRIMING	8-10' (2.4-3m) dry, 20-22' (6.1-6.7m) wet
PORTS	1" (25mm) NPTF
	3/4 HP TEFC or ODP AC induction type
MOTOR	8' (2.4m) power cord with 3-prong grounded plug
	Thermal overload protection
BODY	Bronze
LIQUID TEMPERATURE RANGE	50°F (10°C) to 180°F (82°C)
SHAFT	Stainless steel 316
SEAL	Nitrile lip type
IMPELLER	Nitrile
DIMENSIONS	8.6" high x 7-3/4" long x 13" wide (218mm x 197mm x 331mm)
WEIGHT	35.5lb (16.1kg)

#### 50005 Series

















#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
50005-8411	Yes	230V, 1Ph, 50Hz	Neoprene	MPU
50005-8413	Yes	230V, 1Ph, 50Hz	Nitrile	MPU

- Self-primes from dry up to 4.9' (1.5m)
- Flows up to 0.3 GPM (4.5 LPM)
- Pressure up to 29 psi (2 bar)
- Handles hard or soft solids
- Tolerates abrasive wear
- Non-pulsating flow

#### **SPECIFICATIONS**

PORTS	3/8" BSP internal thread, 1" (25mm) bore hose connection
PUMP HEAD	Bronze
SHAFT	Stainless steel, shaft extension
SEAL	Nitrile lip seal
BEARINGS	Uses motor bearings with polypropylene motor adapter
END COVER	Brass
WEIGHT	13.7lb (6.2kg)

• Handles viscosities up to 500 cP

Uses standard IEC motor

#### 50010 Series













#### **MODELS**

CE	VOLTAGE	IMPELLER	STYLE
Yes	230V, 1Ph, 50Hz	Neoprene	MPU
Yes	230V, 1Ph, 50Hz	Nitrile	MPU
	Yes	Yes 230V, 1Ph, 50Hz	Yes 230V, 1Ph, 50Hz Neoprene

#### **FEATURES**

- Self-primes from dry up to 4.9' (1.5m)
- Flows up to 1.6 GPM (6 LPM)
- Pressure up to 36.2 psi (2.5 bar)
- Will handle hard or soft solids
- Will tolerate abrasive wear
- Non-pulsating flow

• Will handle viscosities up to 500 cP

• Will handle viscosities up to 500 cP

Uses standard IEC motor

Uses standard IEC motor

#### **SPECIFICATIONS**

PORTS	3/8" BSP internal thread and 3/4" (19mm) bore hose connections
PUMP HEAD	Bronze
SHAFT	Stainless steel, shaft extension
SEAL	Nitrile lip seal
BEARINGS	Uses motor bearings with polypropylene motor adapter
END COVER	Brass
WEIGHT	13.9lb (6.3kg)

#### 50020 Series













#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
50020-2411	Yes	230V, 1Ph, 50Hz	Neoprene	MPU
50020-2413	Yes	230V, 1Ph, 50Hz	Nitrile	MPU

- Self-primes from dry up to 4.9' (1.5m)
- Flows up to 4.8 GPM (18 LPM)
- Pressure up to 24.7 psi (1.7 bar)
- Will handle hard or soft solids
- Will tolerate abrasive wear
- Non-pulsating flow

PORTS	1/2" (13mm) BSP internal thread and 1" (25mm) bore hose connections
PUMP HEAD	Bronze
SHAFT	Stainless steel, shaft extension
SEAL	Nitrile lip seal
BEARINGS	Uses motor bearings with polypropylene motor adapter
END COVER	Brass
WEIGHT	14 11b (6 4kg)

100

## 04 Flexible Impeller Pumps



#### 53010 Series













#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
53010-2111	Yes	230V, 1Ph, 50Hz	Neoprene	MPU
53010-2113	Yes	230V, 1Ph, 50Hz	Nitrile	MPU
53010-2115	Yes	230V, 1Ph, 50Hz	Sanitary neoprene	MPU

#### **FEATURES**

- Self-primes from dry up to 4.9' (1.5m)
- Flows up to 3 GPM (12 LPM) at 50.8 psi
- Pressure up to 24.7 psi (1.7 bar)
- Handles hard or soft solids
- Tolerates abrasive wear
- Non-pulsating flow
- Handles viscosities up to 500 cP

#### Uses standard IEC motor

 Dry-running capability for 30 minutes without damage to pump (post operation)

Uses standard IEC motor

Dry-running capability for

30 minutes without damage

to pump (post operation)

#### **SPECIFICATIONS**

PORTS	1/2" (13mm) BSP external thread
PUMP HEAD	Bronze with integral fluid reservoir to protect pump against dry running for up to 30 minutes (post operation)
SHAFT	Stainless steel, shaft extension
SEAL	Carbon/ceramic mechanical face seal, butyl elastomers
BEARINGS	Uses motor bearings with polypropylene motor adapter
END COVER	Brass
WEIGHT	15.7lb (7.1ka)

#### 53020 Series



















#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
53020-2011	Yes	230V, 1Ph, 50Hz	Neoprene	MPU
53020-2013	Yes	230V, 1Ph, 50Hz	Nitrile	MPU

- Self-primes from dry up to 4.9' (1.5m)
- Flows up to 4.5 GPM (18 LPM)
- Pressure up to 24.7 psi (1.7 bar)
- Handles hard or soft solids
- Tolerates abrasive wear
- Non-pulsating flow
- Handles viscosities up to 500 cP

#### **SPECIFICATIONS**

PORTS	3/4" (19mm) BSP internal thread
PUMP HEAD	Bronze with integral fluid reservoir to protect pump against dry running for up to 30 minutes (post operation)
SHAFT	Stainless steel, shaft extension
SEAL	Carbon/ceramic mechanical face seal, butyl elastomers
BEARINGS	Uses motor bearings with polypropylene motor adapter
END COVER	Brass
WEIGHT	15.7lb (7.1kg)

#### 53040 Series













#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
53040-2001	Yes	230V, 1Ph, 50Hz	Neoprene	MPU
53040-2003	Yes	230V, 1Ph, 50Hz	Nitrile	MPU
53040-2021	Yes	230V, 1Ph, 50Hz	Neoprene	MPU
53040-2103	Yes	110V, 1Ph, 50Hz	Neoprene	MPU

#### **FEATURES**

- Self-primes from dry up to 9.8' (3m)
- Flows up to 9.2 GPM (35 LPM)
- Pressure up to 36.3 psi (2.5 bar)
- Handles hard or soft solids
- Tolerates abrasive wear
- Non-pulsating flow
- Handles viscosities up to 500 cP
- Uses standard IEC motor

 Dry-running capability for 30 minutes without damage to pump (post operation)

#### **SPECIFICATIONS**

PORTS	1" (25mm) BSP internal thread
PUMP HEAD	Bronze with integral fluid reservoir to protect pump against dry running for up to 30 minutes (post operation)
SHAFT	Stainless steel, shaft extension
SEAL	Carbon/ceramic mechanical face seal, butyl elastomers
BEARINGS	Uses motor bearings with polypropylene motor adapter
END COVER	Brass
WEIGHT	21lb (9.5kg)

#### 53080 Series













#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
53080-2001	Yes	230V, 1Ph, 50Hz	Neoprene	MPU
53080-2003	Yes	230V, 1Ph, 50Hz	Nitrile	MPU
53080-2063	Yes	220V, 50Hz	Nitrile	MPU

#### **FEATURES**

- Self-primes from dry up to 9.8' (3m)
- Flows up to 21 GPM (80 LPM)
- Pressure up to 29 psi (2 bar)
- Handles hard or soft solids • Tolerates abrasive wear
- Non-pulsating flow

- Handles viscosities up to 500 cP
- Uses standard IEC motor
- Dry-running capability for 30 minutes without damage to pump (post operation)

PORTS	1-1/2" (38mm) BSP internal thread
PUMP HEAD	Bronze with integral fluid reservoir to protect pump against dry running for up to 30 minutes (post operation)
SHAFT	Stainless steel, shaft extension
SEAL	Carbon/ceramic mechanical face seal, nitrile elastomers
BEARINGS	Uses motor bearings with polypropylene motor adapter
CABLE	Fitted with 6.6' (2m) long supply cable
WEIGHT	33.7lb (15kg)



#### 22860 Series













#### **FEATURES**

- Flows up to 9.2 GPM (35 LPM) at 1500 rpm
- Self-primes from dry up to 9.8' (3m)
- Handles hard or soft solids
- Non-pulsating flow
- Gentle pump action does not damage shear-sensitive products
- Easy to service and maintain

 Gentle pump action does not damage shear-sensitive products

Easy to service and maintain

#### **SPECIFICATIONS**

PORTS	3/4" (19mm) BSP internal thread
PUMP HEAD	Bronze
SHAFT	Stainless steel, shaft extension
SEAL	Carbon/ceramic mechanical seal
BEARINGS	Uses motor bearings with epoxy-coated aluminum motor adapter, suitable for B3/B14 D80 frame motor to IEC 71 standard
END COVER	Brass
WEIGHT	4.2lb (1.9kg)

#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
22860-2001	Yes	N/A	Neoprene	Head kit
22860-2003	Yes	N/A	Nitrile	Head kit
22860-2021	Yes	N/A	Neoprene	Head kit, flange
22860-2061	Yes	N/A	Neoprene	Head kit
22860-2702	Yes	N/A	3A EPDM	Head kit

#### 22870 Series

















#### **FEATURES**

- Flows up to 21 GPM (80 LPM) at 1500 rpm
- Self-primes from dry up to 16.4' (5m)
- Handles hard or soft solids
- Non-pulsating flow

#### **SPECIFICATIONS**

PORTS	1" (25mm) BSP internal thread
PUMP HEAD	Bronze
SHAFT	Stainless steel 316, shaft extension
SEAL	Carbon/ceramic mechanical seal
BEARINGS	Uses motor bearings with epoxy-coated aluminum motor adapter, suitable for B3/B14 D80 frame motor to IEC 71 standard
END COVER	Brass
WEIGHT	5.7lb (2.6kg)

#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
22870-2001	Yes	N/A	Neoprene	Head kit
22870-2003	Yes	N/A	Nitrile	Head kit
22870-2043	Yes	N/A	Nitrile	Head kit
22870-2201	Yes	N/A	Neoprene	Head kit, no adapter
22870-2203	Yes	N/A	Nitrile	Head kit, no adapter
22870-2543	Yes	N/A	Nitrile	MPU
22870-2702	Yes	N/A	3A EPDM	Head kit

#### 22880 Series











#### **FEATURES**

- Flows up to 52.8 GPM (200 LPM) at 1500 rpm
- Self-primes from dry up to 9.8' (3m)
- Handles hard or soft solids
- Non-pulsating flow
- Gentle pump action does not damage shear-sensitive products
- · Easy to service and maintain

#### **SPECIFICATIONS**

PORTS	Flanged, adapters available
PUMP HEAD	Bronze
SHAFT	Stainless steel 316, shaft extension
SEAL	Carbon/ceramic mechanical seal
BEARINGS	Uses motor bearings with epoxy-coated aluminum motor adapter, suitable for B3/B14 D100 frame motor to IEC 71 standard
END COVER	Brass
WEIGHT	17lb (7.7kg)

#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
22880-0033	Yes	N/A	Nitrile	Head kit
22880-2201	Yes	N/A	Neoprene	Head kit, flange
22880-2203	Yes	N/A	Nitrile	Head kit, flange
22880-2401	Yes	N/A	Neoprene	Head kit, flange

#### 22890 Series











#### **FEATURES**

- Flows up to 71.3 GPM (270 LPM) at 1500 rpm
- Self-primes from dry up to 14.8' (4.5m)
- Handles hard or soft solids
- Non-pulsating flow
- Gentle pump action does not damage shear-sensitive products
- Easy to service and maintain

#### **SPECIFICATIONS**

PORTS	Flanged, adapters available
PUMP HEAD	Bronze
SHAFT	Stainless steel 316, shaft extension
SEAL	Carbon/ceramic mechanical seal
BEARINGS	Uses motor bearings with epoxy-coated aluminum motor adapter, suitable for B3/B14 D100 frame motor to IEC 71 standard
END COVER	Brass
WEIGHT	20.5lb (9.3kg)

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
22890-2001	Yes	N/A	Neoprene	Head kit





#### **53270 Series**













#### **FEATURES**

- Self-primes from dry up to 14.8' (4.5m)
- Handles hard or soft solids
- Non-pulsating flow
- Flows up to 71.3 GPM (270 LPM) at 1500 rpm Gentle pump action does not damage shear-sensitive products

  - Easy to service and maintain

#### **SPECIFICATIONS**

PORTS	2" (51mm) BSP internal thread
PUMP HEAD	Bronze
SHAFT	Stainless steel 316, shaft extension
SEAL	Carbon/ceramic mechanical seal
BEARINGS	Uses motor bearings with epoxy-coated aluminum motor adapter, suitable for B3/B14 D100 frame motor to IEC 71 standard
END COVER	Brass
WEIGHT	20.5lb (9.3kg)

#### **MODELS**

See page 128 for model numbers

### 2620 Bronze Pedestal Pump













#### **SPECIFICATIONS**

MAX FLOW RATE	4.4 GPM (20 LPM)
MAX PRESSURE	13 psi (0.9 bar) or 30' (9.1m) of head
SELF-PRIMING	8-10' (2.4-3m) dry, 15-22' (4.6-6.7m) wet
PORTS	3/8" (10mm) NPTF
BODY	Bronze
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 160°F (71°C) Nitrile - 50°F (10°C) to 160°F (71°C)
SHAFT	Bronze, 1/2" (13mm) diameter
SEAL	Neoprene lip type
IMPELLER	Neoprene, nitrile
DIMENSIONS	3.2" high x 3.1" long x 3.9" wide (81mm x 79mm x 100mm)
WEIGHT	2.7lb (1.3kg)

### 2760 Bronze Pedestal Pump

























#### **SPECIFICATIONS**

MAX FLOW RATE	4.4 GPM (20 LPM)
MAX PRESSURE	17 psi (1.2 bar) or 40' (12.2m) of head
SELF-PRIMING	8-10' (2.4-3m) dry, 15-22' (4.6-6.7m) wet
PORTS	1/4" (6mm) NPTF
BODY	Bronze
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 180°F (82°C) Nitrile - 50°F (10°C) to 180°F (82°C)
SHAFT	Stainless steel, 3/8" (10mm) diameter
SEAL	Neoprene lip type
IMPELLER	Neoprene, nitrile
DIMENSIONS	2.4" high x 2.6" long x 3.6" wide (62mm x 67mm x 90mm)
WEIGHT	1.5lb (0.7kg)

### 1673 Bronze Pedestal Flexible Impeller Pump















MAX PRESSURE         21 psi (1.5 bar) or 50' (15.2m) of head           SELF-PRIMING         8-10' (2.4-3m) dry, 15-20' (4.6-6.1m) wet           PORTS         1/2" (13mm) NPTF           BODY         Bronze           LIQUID TEMPERATURE RANGE         Neoprene - 45°F (7°C) to 160°F (71°C) Nitrile - 50°F (10°C) to 180°F (82°C)           SHAFT         Stainless steel, 5/8" (16mm) diameter           SEAL         Nitrile lip or face seal           IMPELLER         Neoprene, nitrile           DIMENSIONS         3.8" high x 4.1" long x 4-1/2" wide (96mm x 104mm x 113mm)           WEIGHT         4.25lb (1.4kg)	MAX FLOW RATE	8.9 GPM (40 LPM)
PORTS	MAX PRESSURE	21 psi (1.5 bar) or 50' (15.2m) of head
BODY Bronze  LIQUID TEMPERATURE RANGE Neoprene - 45°F (7°C) to 160°F (71°C) Nitrile - 50°F (10°C) to 180°F (82°C)  SHAFT Stainless steel, 5/8" (16mm) diameter  SEAL Nitrile lip or face seal IMPELLER Neoprene, nitrile  3.8" high x 4.1" long x 4-1/2" wide (96mm x 104mm x 113mm)	SELF-PRIMING	8-10' (2.4-3m) dry, 15-20' (4.6-6.1m) wet
LIQUID TEMPERATURE RANGE  Neoprene - 45°F (7°C) to 160°F (71°C) Nitrile - 50°F (10°C) to 180°F (82°C)  SHAFT  Stainless steel, 5/8" (16mm) diameter  Nitrile lip or face seal  IMPELLER  Neoprene, nitrile  3.8" high x 4.1" long x 4-1/2" wide (96mm x 104mm x 113mm)	PORTS	1/2" (13mm) NPTF
SHAFT  SEAL  Nitrile - 50°F (10°C) to 180°F (82°C)  Stainless steel, 5/8" (16mm) diameter  SEAL  Nitrile lip or face seal  IMPELLER  Neoprene, nitrile  3.8" high x 4.1" long x 4-1/2" wide (96mm x 104mm x 113mm)	BODY	Bronze
Nitrile lip or face seal  IMPELLER  Neoprene, nitrile  3.8" high x 4.1" long x 4-1/2" wide (96mm x 104mm x 113mm)	LIQUID TEMPERATURE RANGE	, , , , , , , , , , , , , , , , , , , ,
Neoprene, nitrile	SHAFT	Stainless steel, 5/8" (16mm) diameter
3.8" high x 4.1" long x 4-1/2" wide (96mm x 104mm x 113mm)	SEAL	Nitrile lip or face seal
(96mm x 104mm x 113mm)	IMPELLER	Neoprene, nitrile
<b>WEIGHT</b> 4.25lb (1.4kg)	DIMENSIONS	8
	WEIGHT	4.25lb (1.4kg)











### 777 Bronze Pedestal Flexible Impeller Pump





















MAX FLOW RATE	17.8 GPM (80 LPM)
MAX PRESSURE	26 psi (1.8 bar) or 60' (18.3m) of head
SELF-PRIMING	8-10' (2.4-3m) dry, 20-22' (6.1-6.7m) wet
PORTS	1" (25mm) NPTF
BODY	Bronze
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 160°F (71°C) Nitrile - 50°F (10°C) to 160°F (71°C)
SHAFT	Stainless steel
SEAL	Nitrile lip or face type
IMPELLER	Neoprene, nitrile
DIMENSIONS	3.6" high x 4-3/4" long x 6.3" wide (90mm x 120mm x 159mm)
WEIGHT	5.8lb (2.6kg)

### 6400 Bronze Pedestal Pump



















#### **SPECIFICATIONS**

MAX FLOW RATE	44.4 GPM (200 LPM)
MAX PRESSURE	26 psi (1.8 bar) or 60' (18.3m) of head
SELF-PRIMING	8-10' (2.4-3m) dry, 15-22' (4.6-6.7m) wet
PORTS	1-1/4" (32mm) NPTF
BODY	Bronze
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 180°F (82°C) Nitrile - 50°F (10°C) to 180°F (82°C)
SHAFT	Bronze, 1-1/4" (32mm) diameter
SEAL	Carbon ceramic face type
IMPELLER	Neoprene
DIMENSIONS	4.9" high x 5.9" long x 8.1" wide (123mm x 149mm x 204mm)
WEIGHT	10.5lb (4.8kg)

### 18370 Bronze Pedestal Pump & 52270 Series













#### **SPECIFICATIONS**

	MODEL 18370 (US ONLY)	MODEL 52220
MAX FLOW RATE	60 GPM (270 LPM)	60 GPM (270 LPM)
SELF-PRIMING	7.8' (2.4m)	7.8' (2.4m)
PORTS	2" (51mm) NPT	2" flanged or 2" (51mm) BSP
BODY	Bronze	Bronze, iron bearing housing
LIQUID TEMPERATURE RANGE	45°F (7°C) to 180°F (82°C)	45°F (7°C) to 180°F (82°C)
SHAFT	Stainless steel, 1" (25mm) diameter	Stainless steel, 1" (25mm) diameter
SEAL	Carbon/ceramic mechanical	Carbon/ceramic mechanical
BEARINGS	Twin row, ball type	Twin row, ball type
IMPELLER	Neoprene/nitrile	Neoprene/nitrile
DIMENSIONS	10.9" high x 8" long x 5.1" wide (276mm x 170mm x 128mm)	11" high x 7" long x 5" wide (79mm x 178mm x 127mm)
WEIGHT	19lb (8.6kg)	19.8lb (9kg)

#### 51510 & 51520 Series













	MODEL 51510	MODEL 51520
MAX FLOW RATE	2.2 GPM (10 LPM)	4.4 GPM (20 LPM)
SELF-PRIMING	4.9' (1.5m)	4.9' (1.5m)
PORTS	3/8" (10mm) BSP or 3/8" (10mm) NPT	3/8" (10mm) BSP or 3/8" (10mm) NPT
BODY	Bronze	Bronze
LIQUID TEMPERATURE RANGE	45°F (7°C) to 180°F (82°C)	45°F (7°C) to 180°F (82°C)
SHAFT	Stainless steel, 1" (25mm) diameter	Stainless steel, 1" (25mm) diameter
SEAL	Carbon/ceramic mechanical	Carbon/ceramic mechanical
BEARINGS	Sealed ball bearings	Sealed ball bearings
IMPELLER	Neoprene	Neoprene
DIMENSIONS	3.6" high x 3" long x 2.4" wide (92mm x 80mm x 60mm)	3-1/4" high x 3" long x 3-1/2" wide (95mm x 80mm x 85mm)
WEIGHT	1.4lb (0.6kg)	1.5lb (0.7kg)

MAX PRESSURE	26 psi (1.8 bar) or 60° (18.3m) of head
SELF-PRIMING	8-10' (2.4-3m) dry, 20-22' (6.1-6.7m) wet
PORTS	1" (25mm) NPTF
BODY	Bronze
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 160°F (71°C) Nitrile - 50°F (10°C) to 160°F (71°C)
SHAFT	Stainless steel
SEAL	Nitrile lip or face type
IMPELLER	Neoprene, nitrile
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#### 52040 & 52580 Series





















#### **SPECIFICATIONS**

	MODEL 52040 (EUROPEAN ONLY)	MODEL 52580
MAX FLOW RATE	8.9 GPM (40 LPM)	17.8 GPM (80 LPM)
SELF-PRIMING	7.8' (2.4m)	7.8' (2.4m)
PORTS	3/4" (19mm) BSP	1" (25mm) BSP, 1" (25mm) NPT
BODY	Bronze	Bronze
LIQUID TEMPERATURE RANGE	45°F (7°C) to 180°F (82°C)	45°F (7°C) to 180°F (82°C)
SHAFT	Stainless steel, 1" (25mm) diameter	Stainless steel, 1" (25mm) diameter
SEAL	Lip type	Carbon/ceramic mechanical
BEARINGS	Twin row, ball type	Twin row, ball type
IMPELLER	Neoprene/nitrile	Neoprene/nitrile
DIMENSIONS	5" high x 4" long x 3" wide (128mm x 106mm x 78mm)	6-1/2" high x 5" long x 4" wide (180mm x 120mm x 100mm)
WEIGHT	3.3lb (1.5kg)	7.3lb (3.3kg)

#### 11860 & 11870 Series













#### **SPECIFICATIONS**

	MODEL 11860	MODEL 11870
CLUTCH VOLTAGE	12V or 24V DC	12V or 24V DC
MAX FLOW RATE	23 GPM (87 LPM)	62 GPM (234 LPM)
SELF-PRIMING	7.8' (2.4m)	7.8' (2.4m)
PORTS	1" (25mm) NPT	1-1/4" (32mm)
BODY	Bronze	Bronze
LIQUID TEMPERATURE RANGE	45°F (7°C) to 180°F (82°C)	45°F (7°C) to 180°F (82°C
SHAFT	Stainless steel	Stainless steel
SEAL	Carbon/ceramic mechanical	Carbon/ceramic mechanical
BEARINGS	Twin row, ball type	Twin row, ball type
BELT	2 groove A, 1 groove B	2 groove A, 1 groove B
PULLEY	7" (178mm) diameter	7" (178mm) diameter
IMPELLER	Neoprene/nitrile	Neoprene/nitrile
DIMENSIONS	6.2" high x 5.4" long x 4.9" wide (157mm x 137mm x 125mm)	8.2" high x 6.1" long x 7.1" wide (208mm x 154mm x 179mm)
WEIGHT	15lb (6.8kg)	19.5lb (8.9kg)

### 52200 & 52220 Series

















#### **SPECIFICATIONS**

	MODEL 52200	MODEL 52220
MAX FLOW RATE	44.5 GPM (200 LPM)	44.5 GPM (200 LPM)
SELF-PRIMING	7.8' (2.4m)	7.8' (2.4m)
PORTS	1-1/2" (38mm) BSP	1-1/2" (38mm) flange
BODY	Bronze	Bronze
LIQUID TEMPERATURE RANGE	45°F (7°C) to 180°F (82°C)	45°F (7°C) to 180°F (82°C)
SHAFT	Stainless steel, 1" (25mm) diameter	Stainless steel, 1" (25mm) diameter
SEAL	Carbon/ceramic mechanical	Carbon/ceramic mechanical
BEARINGS	Twin row, ball type	Twin row, ball type
IMPELLER	Neoprene/nitrile	Neoprene/nitrile
DIMENSIONS	8" high x 6" long x 5" wide (204mm x 150mm x 120mm)	10-1/2" high x 6" long x 6" wide (276mm x 152mm x 146mm)
WEIGHT	11lb (5kg)	15.4lb (7kg)

### 50580 Series













CLUTCH VOLTAGE	12V or 24V DC
MAX FLOW RATE	17.8 GPM (80 LPM)
SELF-PRIMING	7.8' (2.4m)
PORTS	1" (25mm) BSP, 1" (25mm) NPT
BODY	Bronze
LIQUID TEMPERATURE RANGE	45°F (7°C) to 180°F (82°C)
SHAFT	Stainless steel
SEAL	Carbon/ceramic mechanical
BEARINGS	Twin row, ball type
BELT	2 groove A, 1 groove B
PULLEY	7" (178mm) diameter
IMPELLER	Neoprene/nitrile
DIMENSIONS	6-1/2" high x 5" long x 7" wide (160mm x 120mm x 178mm)
WEIGHT	11lb (5kg)





#### 50200 &50220 Series



















#### **SPECIFICATIONS**

	MODEL 50200 (EUROPEAN ONLY)	MODEL 50220 (EUROPEAN ONLY)
CLUTCH VOLTAGE	12V or 24V DC	12V or 24V DC
MAX FLOW RATE	44.5 GPM (200 LPM)	44.5 GPM (200 LPM)
SELF-PRIMING	7.8' (2.4m)	7.8' (2.4m)
PORTS	1-1/2" (38mm) BSP	1-1/2" (38mm) flange
BODY	Bronze	Bronze
LIQUID TEMPERATURE RANGE	45°F (7°C) to 180°F (82°C)	45°F (7°C) to 180°F (82°C)
SHAFT	Stainless steel	Stainless steel
SEAL	Carbon/ceramic mechanical	Carbon/ceramic mechanical
BEARINGS	Twin row, ball type	Twin row, ball type
BELT	2 groove A, 1 groove B	2 groove A, 1 groove B
PULLEY	7" (178mm) diameter	7" (178mm) diameter
IMPELLER	Neoprene/nitrile	Neoprene/nitrile
DIMENSIONS	9-1/2" high x 6" long x 7" wide (239mm x 153mm x 178mm)	9-1/2" high x 6" long x 7" wide (239mm x 153mm x 178mm)
WEIGHT	25lb (11.2kg)	25lb (11.2kg)

### 18330 & 50270 Series



















#### **SPECIFICATIONS**

CLUTCH VOLTAGE	12V or 24V DC 83 GPM (314 LPM)	12V or 24V DC
	83 GPM (314 LPM)	
MAX FLOW RATE		60 GPM (270 LPM)
SELF-PRIMING	7.8' (2.4m)	7.8' (2.4m)
PORTS	2" (51mm) NPT	2" (51mm) BSP 2" (51mm) flange
BODY	Bronze	Bronze
LIQUID TEMPERATURE RANGE	45°F (7°C) to 180°F (82°C)	45°F (7°C) to 180°F (82°C)
SHAFT	Stainless steel	Stainless steel
SEAL	Carbon/ceramic mechanical	Carbon/ceramic mechanical
BEARINGS	Twin row, ball type	Twin row, ball type
BELT	2 groove A, 1 groove B	2 groove A, 1 groove B
PULLEY	7" (178mm) diameter	7" (178mm) diameter
IMPELLER	Neoprene/nitrile	Neoprene/nitrile
DIMENSIONS	12.4" high x 5.9" long x 5-3/4" wide (316mm x 151mm x 146mm)	10" high x 7" long x 7" wide (264mm x 170mm x 178mm)
WEIGHT	24lb (11kg)	27lb (12.2kg)



## Flexible Impeller Pumps 04

STAINLESS STEEL

#### 28230 & 28240 Series













- Self-primes from dry up to 16.4' (5m)
- Flows up to 10.6 GPM (40 LPM)
- Pressure up to 43.5 psi (3 bar)
- Handles hard or soft solids 0.2" (5mm) maximum diameter
- Tolerates abrasive wear replaceable
- · Non-pulsating flow, proportional to speed
- Handles viscosities up to 4,000 cP
- Minimal shear to thixotropic fluids
- Easy to service and maintain
- Fits IEC standard motor B3/B14, frame 80 (model 28240)

• Handles viscosities up to 4,000 cP

 Minimal shear to thixotropic fluids • Fits IEC standard motor B3/B14,

frame 80 (model 28340)

· Easy to service and maintain

#### **SPECIFICATIONS**

Standard - 36 psi (2.5 bar) High - 43.5 psi (3 bar)  3/4" (19mm) BSP internal thread to BS21 DIN2999  Stainless steel 316, as-cast interior and exterior finish  Stainless steel 316
DIN2999 Stainless steel 316, as-cast interior and exterior finish Stainless steel 316
exterior finish Stainless steel 316
Carlaga /agrapaia magalaga and aniagl faga agal
Carbon/ceramic mechanical face seal, nitrile or FKM elastomer
Optional - Tungsten carbide/ceramic hard faced mechanical seal, nitrile lip seal on shaft sleeve, carbon/ceramic flushed seal, tungsten carbide/ceramic hard faced flush seal
Model 28230 - greased ball bearings, epoxy-coated, cast iron housing
Model 28240 - uses motor bearings with epoxy-coated, cast iron motor adapter
Stainless steel 316
Neoprene, EPDM, nitrile, FKM
Model 28230 - 6.8lb (2.8kg)

#### 28330 & 28340 Series













#### **FEATURES**

- Self-primes from dry up to 16.4' (5m)
- Flows up to 21 GPM (80 LPM)
- Pressure up to 58 psi (4 bar)
- Handles hard or soft solids 0.2" (5mm) maximum diameter
- Tolerates abrasive wear replaceable wearplate
- Non-pulsating flow, proportional to speed

MAX PRESSURE	Standard - 36 psi (2.5 bar) High - 58 psi (4 bar)
PORTS	1" (25mm) BSP internal thread to BS21 DIN2999
PUMP HEAD	Stainless steel 316, as-cast interior and exterior finish
SHAFT	Model 28330 - stainless steel 316 Model 28340 - stainless steel 316, shaft extension
	Carbon/ceramic mechanical face seal, nitrile or FKM elastomer
SEAL	Optional - Tungsten carbide/ceramic hard faced mechanical seal, nitrile lip seal on shaft sleeve, carbon/ceramic flushed seal, tungsten carbide/ceramic hard faced flush seal
BEARINGS	Model 28330 - greased ball bearings, epoxy-coated, cast iron housing
DEARINGS	Model 28340 - uses motor bearings with epoxy-coated, cast iron motor adapter
END COVER	Stainless steel 316
IMPELLER	Neoprene, EPDM, nitrile, FKM
WEIGHT	Model 28330 - 9.3lb (4.2kg) Model 28340 - 7.3lb (3.3kg)

STAINLESS STEEL

#### 28430 & 28440 Series











#### **FEATURES**

- Self-primes from dry up to 16.4' (5m)
- Flows up to 52.8 GPM (200 LPM)
- Pressure up to 58 psi (4 bar)
- Handles hard or soft solids 0.4" (9mm) maximum diameter
- Tolerates abrasive wear replaceable wearplate
- Non-pulsating flow, proportional
- Handles viscosities up to 10,000 cP

#### Minimal shear to thixotropic fluids

- Fits IEC standard motor B3/B14, frame 90 (model 28440)
- Easy to service and maintain

#### **SPECIFICATIONS**

MAX PRESSURE	Standard - 36 psi (2.5 bar) High - 58 psi (4 bar)
PORTS	1-1/2" (38mm) BSP internal thread to BS21 DIN2999
PUMP HEAD	Stainless steel 316, as-cast interior and exterior finish
SHAFT	Model 28430 - stainless steel 316 Model 28440 - stainless steel 316, shaft extension
	Carbon/ceramic mechanical face seal, nitrile or FKM elastomer
SEAL	Optional - Tungsten carbide/ceramic hard faced mechanical seal, nitrile lip seal on shaft sleeve, carbon/ceramic flushed seal, tungsten carbide/ceramic hard faced flush seal
BEARINGS	Model 28430 - greased ball bearings Model 28440 - epoxy-coated, cast iron housing
END COVER	Stainless steel 316
IMPELLER	Neoprene, EPDM, nitrile, FKM
WEIGHT	Model 28430 - 19.2lb (8.7kg) Model 28440 - 14.1lb (6.4kg)

#### 28530 & 28540 Series















#### **FEATURES**

- Self-primes from dry up to 14.8' (4.5 m)
- Flows up to 97.7 GPM (370 LPM)
- Pressure up to 43.5 psi (3 bar)
- Handles hard or soft solids 1/2" (13mm) maximum diameter
- Tolerates abrasive wear replaceable
- Non-pulsating flow, proportional to speed
- Handles viscosities up to 50,000 cP

- Minimal shear to thixotropic fluids
- Fits IEC standard motor B3/B14, frame 100 (model 28540)
- Easy to service and maintain

MAX PRESSURE	Medium - 36 psi (2.5 bar) High - 43.5 psi (3 bar)		
PORTS	2" (51mm) BSP external thread to BS21 DIN2999		
PUMP HEAD	Stainless steel 316, as-cast interior and exterior finish		
SHAFT	Model 28530 - stainless steel 316		
	Carbon/ceramic mechanical face seal, nitrile or FKM elastomer		
SEAL	Optional - Tungsten carbide/ceramic hard faced mechanical seal, nitrile lip seal on shaft sleeve, carbon/ceramic flushed seal, tungsten carbide/ceramic hard faced flush seal		
BEARINGS	Model 28530 - greased ball bearings, epoxy-coated, cast iron housing		
DEARINGS	Model 28540 - uses motor bearings with epoxy-coated, cast iron motor adapter		
END COVER	Stainless steel 316		
IMPELLER	Neoprene, EPDM, nitrile, FKM		
WEIGHT	Model 28530 - 32lb (14.5kg) Model 28540 - 21.4lb (9.7kg)		

STAINLESS STEEL



#### 30510 Industrial Stainless Steel Pedestal & Close-Coupled Flex Pump















Use where single or variable speed operation and 316 stainless steel material is desirable. Self-priming, 8 GPM (30 LPM) flow and debris-tolerant. A nitrile impeller is ideal for oil-based products. Use neoprene for water and generalpurpose pumping. Use FKM for hydrocarbons and most solvents.

Optional EPDM impeller kit (7614-0002) for hygienic applications and some keytone solvents. Use a tungsten carbide seal when pumping highly corrosive or abrasive fluids. Long-lasting AC induction motor has no brushes to wear out. Do not pump gasoline or other flammable liquids. Motor is not explosion-proof. Do not run dry.

For pump head-only models (30510-2xxx), select NEMA 56 C-frame C-face motor rated at 3/4 HP at 1750 rpm with appropriate service factor. Motor must handle high-axial loads. Front ball bearing locked against axial movement is recommended. Motor must deliver 1.5ft-lbs and 4.3ft-lbs torque minimum in forward and reverse directions, respectively. Use only capacitor-start motors.

For pedestal-mount models (30510-0xxx) operating at 1750 rpm, select a 3/4 HP or 1-1/2 HP motor for standard or high-pressure impellers, respectively, with an appropriate service factor. For high-pressure impellers, the motor must supply 3ft-lbs or 6.9ft-lbs of torque minimum for forward and reverse operation, respectively. Rated flow is based on neoprene impeller pumping water. Reduce rated flow 10 percent for nitrile, FKM and EPDM standard impellers. Reduce rated flow 15 percent for nitrile, FKM and EPDM high-pressure impellers.

#### **SPECIFICATIONS**

VOLTAGE	60Hz - 115V AC, single phase, non-CE
MAX FLOW RATE	8.2 GPM (31 LPM)
MAX PRESSURE	Standard - 30 psi (2.1 bar) or 70' (21.3m) of head High - 60 psi (4.2 bar) or 139' (42.4m) of head
SELF-PRIMING	Neoprene/nitrile - 8-10' (2.4-3m) dry, 18-22' (5.5-6.7m) wet
SELF-FRIMING	FKM/EPDM - 4-6' (1.2-1.8m) dry, 18-22' (5.5-6.7m) wet
PORTS	3/4" (19mm) NPTF
	3/4 HP, TEFC AC induction type
	56 C-frame, C-face
MOTOR	6' (1.8m) power cord with 3-prong grounded plug
	Thermal overload protection
BODY	Stainless steel 316
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 180°F (82°C) Nitrile - 50°F (10°C) to 180°F (82°C) FKM - 60°F (15°C) to 180°F (82°C) EPDM - 45°F (7°C) to 185°F (85°C)
SHAFT	Stainless steel 316
SEAL	Mechanical carbon or tungsten carbide on ceramic
IMPELLER	Neoprene, nitrile, FKM, optional EPDM
	Pump and motor - 9.1" high x 8.9" long x 16" wide (230mm x 224mm x 403mm)
DIMENSIONS	Pump head - 6.6" high x 6.6" long x 5-3/4" wide (168mm x 168mm x 145mm)
	Pedestal mount - 4-3/4" high x 4-3/4" long x 9-1/4" wide (120mm x 120mm x 233mm)
WEIGHT	Pump and motor - 36lb (16.3kg) Pump head - 7.5lb (3.4kg) Pedestal mount - 8.5lb (3.9kg)

#### 30520 Industrial Stainless Steel Pedestal & Close-Coupled Flex Pump















Use where single or variable speed operation is desirable. Self-priming, 22 GPM flow and debris-tolerant. A nitrile impeller is ideal for oil-based products. Use neoprene for water and general-purpose pumping. Use FKM for hydrocarbons and most solvents. Optional EPDM impeller kit (8981-0002) for hygienic applications and some keytone solvents. Use tungsten carbide seal when pumping highly-corrosive or abrasive fluids. Do not pump gasoline or other flammable liquids. Motor is not explosion-proof. Do not run dry.

For pump head-only models (30520-2xxx), select NEMA H145 TC-frame C-face motor rated at 1-1/2 HP at 1750 rpm with appropriate service factor. Motor must handle high-axial loads. Front ball bearing locked against axial movement is recommended. Motor must deliver 4.8ft-lbs and 11.2ft-lbs torque minimum in forward and reverse directions, respectively. Use only capacitor-start motors.

For pedestal mount models (30520-0xxx) operating at 1750 rpm, select a 1-1/2 HP or 3 HP motor for standard or high-pressure impellers, respectively, with an appropriate service factor. For high-pressure impellers, the motor must supply 7.9ft-lbs or 16.3ft-lbs of torque minimum for forward and reverse operation, respectively. Rated flow is based on neoprene impeller pumping water. Reduce rated flow 10 percent for nitrile, FKM and EPDM standard impellers. Reduce rated flow 15 percent for nitrile, FKM and EPDM high-pressure impellers.

#### **SPECIFICATIONS**

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VOLTAGE	60Hz - 115V and 230V AC, single phase, non-CE
MAX FLOW RATE	22 GPM (83 LPM)
MAX PRESSURE	Standard - 30 psi (2.1 bar) or 69' (21m) of head High - 60 psi (4.2 bar) or 138' (42m) of head
CELE DRIVING	Neoprene/nitrile - 8-10' (2.4-3m) dry, 18-22' (5.5-6.7m) wet
SELF-PRIMING	FKM/EPDM - 4-6' (1.2-1.8m) dry, 18-22' (5.5-6.7m) wet
PORTS	1" (25mm) NPTF
	1-1/2 HP, TEFC AC induction type
	H145 TC-frame, C-face
MOTOR	6' (1.8m) power cord with 3-prong grounded plug
	Thermal overload protection
BODY	Epoxy 316
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 180°F (82°C) Nitrile - 50°F (10°C) to 180°F (82°C) FKM - 60°F (15°C) to 180°F (82°C) EPDM - 45°F (7°C) to 185°F (85°C)
SHAFT	Epoxy 316 sleeve
SEAL	Mechanical carbon or tungsten carbide on ceramic
IMPELLER	Neoprene, nitrile, FKM, optional EPDM
	Pump and motor - 8.4" high x 8.9" long x 18-1/4" wide (213mm x 224mm x 460mm)
DIMENSIONS	Pump head - 6.6" high x 6.6" long x 7-1/2" wide (168mm x 168mm x 189mm)
	Pedestal mount - 4-3/4" high x 4-3/4" long x 9-1/4" wide (120mm x 120mm x 233mm)
WEIGHT	Pump and motor - 36lb (16.3kg) Pump head - 7.5lb (3.4kg) Pedestal mount - 8.5lb (3.9kg)

Stainless Steel Flexible Impeller Pumps





#### 30530 Industrial Stainless Steel Pedestal & Close-Coupled Flex Pump

















Use where single or variable speed operation and 316 stainless steel material are desirable. Self-priming, 50 GPM (189 LPM) flow and debris-tolerant. A nitrile impeller is ideal for oil-based products. Use neoprene for water and general purpose pumping. Use FKM for hydrocarbons and most solvents. Optional standard EPDM impeller kit (14346-0002) for hygienic applications and some keytone solvents. Use tungsten carbide seal when pumping highly corrosive or abrasive fluids. Do not pump gasoline or other flammable liquids. Motor is not explosion-proof. Do not run dry.

For pump head-only models (30530-2xxx) select NEMA 184 TC-frame C-face motor rated at 5 HP at 1750 rpm with appropriate service factor. Motor must handle high-axial loads. Front ball bearing locked against axial movement is recommended. Motor must deliver 14.5ft-lbs and 43ft-lbs torque minimum in forward and reverse directions, respectively.

For standard impellers only. Use only capacitor-start motors. For pedestalmount models (30530-0xxx) operating at 1750 rpm, select a 3 HP or 6 HP motor for standard or high-pressure impellers, respectively, with an appropriate service factor. For high-pressure impellers, the motor must supply 26ft-lbs or 40ft-lbs of torque minimum for forward and reverse operation, respectively. Rated flow is based on neoprene impeller pumping water. Reduce rated flow 10 percent for nitrile, FKM and EPDM standard impellers. Reduce rated flow 15 percent for nitrile, FKM and EPDM high-pressure impellers.

#### **SPECIFICATIONS**

VOLTAGE	60Hz - 230V and 460V AC, three phase, non-CE	
MAX FLOW RATE	50 GPM (189 LPM)	
MAX PRESSURE	Standard - 30 psi (2.1 bar) or 69' (21m) of head High - 60 psi (4.2 bar) or 138' (42m) of head	
CELE PRIMING	Neoprene/nitrile - 8-10' (2.4-3m) dry, 18-22' (5.5-6.7m) wet	
SELF-PRIMING	FKM/EPDM - 4-6' (1.2-1.8m) dry, 18-22' (5.5-6.7m) wet	
PORTS	1-1/2" (38mm) NPTF	
	5 HP, TEFC AC induction type	
	184 TC-frame, C-face	
MOTOR	6' (1.8m) power cord with 3-prong grounded plug	
	Thermal overload protection	
BODY	Stainless steel 316	
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 180°F (82°C) Nitrile - 50°F (10°C) to 180°F (82°C) FKM - 60°F (15°C) to 180°F (82°C) EPDM - 45°F (7°C) to 185°F (85°C)	
SHAFT	Stainless steel 316	
SEAL	Mechanical carbon or tungsten carbide on ceramic	
IMPELLER	Neoprene, nitrile, FKM, optional EPDM	
	Pump and motor - 9" high x 10.4" long x 23-1/4" wide (227mm x 262mm x 586mm)	
DIMENSIONS	Pump head - 9" high x 9" long x 8.3" wide (227mm x 227mm x 210mm)	
	Pedestal mount - 5-3/4" high x 6.9" long x 11.6" wide (145mm x 174mm x 292mm)	
WEIGHT	Pump and motor - 93.5lb (42.5kg) Pump head - 30lb (13.6kg) Pedestal mount - 21lb (9.5kg)	

#### 30540 Industrial Stainless Steel Pump













For pedestal-mount models operating at 1750 rpm, select a 5 HP or 7 HP motor for standard or high-pressure impellers, respectively, with an appropriate service factor. For standard-pressure impellers, the motor must supply 21ft-lbs or 38ft-lbs of torque minimum for forward and reverse operation, respectively. For highpressure impellers, the motor must supply 28ft-lbs or 49ft-lbs of torque minimum for forward and reverse operation, respectively. Optional standard EPDM impeller kit (8963-0002) and high-pressure EPDM impeller kit (8600-0002).

Rated flow is based on standard neoprene impeller pumping water. Reduce rated flow 10 percent for nitrile, FKM, and EPDM standard and high-pressure impellers.

#### **SPECIFICATIONS**

MAX FLOW RATE	105 GPM (397 LPM)
MAX PRESSURE	Standard - 20 psi (1.4 bar) or 46' (14m) of lift High - 60 psi (4.2 bar) or 138' (42m) of lift
CELE DRIMING	Neoprene/nitrile - 8-10' (2.4-3m) dry, 18-22' (5.5-6.7m) wet
SELF-PRIMING	FKM/EPDM - 4-6' (1.2-1.8m) dry, 18-22' (5.5-6.7m) wet
PORTS	2" (51mm) NPTM
BODY	Stainless steel 316
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 180°F (82°C) Nitrile - 50°F (10°C) to 180°F (82°C) FKM - 60°F (15°C) to 180°F (82°C) EPDM - 45°F (7°C) to 185°F (85°C)
SHAFT	Stainless steel 316
SEAL	Mechanical carbon-on-ceramic or carbon- on-tungsten, nitrile or FKM
IMPELLER	Neoprene, nitrile, FKM, EPDM
DIMENSIONS	8-3/4" high x 7-1/2" long x 14-1/8" wide (223mm x 191mm x 359mm)
WEIGHT	8.5lb (3.9kg)

#### 4720 Stainless Steel Utility Flex Pump











Use where stainless steel, self-priming, 11 GPM (41 LPM) flow, debris-tolerance, and portable 115V AC or 230V AC 60Hz operation is desired. A nitrile impeller is ideal for oil-based products. Use neoprene for water and general-purpose pumping. Motor is not explosion-proof. Do not run dry.

#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
4720-0001	No	115V and 230V AC	Neoprene	MPU, pedestal
4720-0003	No	115V and 230V AC	Nitrile	MPU, pedestal

VOLTAGE	60Hz - 115V and 230V AC, single phase, non-CE
MAX FLOW RATE	11 GPM (41 LPM)
MAX PRESSURE	21 psi (1.5 bar) or 50' (15.2m) of head
SELF-PRIMING	8-10' (2.4-3m) dry, 18-22' (5.5-6.7m) wet
PORTS	1/2" (13mm) NPTF
	1/3 HP TEFC AC induction type
MOTOR	6' (1.8m) power cord with 3-prong grounded plug
	Thermal overload protection
BODY	Stainless steel
LIQUID TEMPERATURE RANGE	Neoprene - 45°F (7°C) to 180°F (82°C) Nitrile - 50°F (10°C) to 180°F (82°C)
SHAFT	Stainless steel 316
SEAL	Neoprene lip type
IMPELLER	Neoprene, nitrile
DIMENSIONS	8-1/4" high x 7-3/4" long x 13-1/8" wide (208mm x 195mm x 331mm)
WEIGHT	35lb (15.9kg)

118

#### 119

### 04 Flexible Impeller Pumps

SANITARY INTRODUCTION



#### Flexible Impeller Hygienic Positive Displacement Pump





Motor Mount Pumps



Milk Tanker Pumps

Jabsco hygienic flexible impeller pumps handle low- and high-viscosity liquids, gels and pastes, and can pass suspended soft and hard solids with minimal damage. The output-flow is smooth, steady and totally pulsation-free, and their gentle pumping action will not break down shear-sensitive or fragile liquids. Designed to be cleaned in place or easily strip-cleaned, Xylem Jabsco flexible impeller pumps frequently offer a more suitable and cost-effective alternative to many other pump types.

#### **OPTIONS**

#### **PEDESTAL PUMPS**

- Foot-mounted to couple to gearbox or belt-drive
- Hygienic rubber impeller
- Long-life mechanical shaft seal
- All 316 grade stainless steel parts with high-surface finish
- Used in food, dairy, beverage, healthcare and cosmetics sectors

#### **MOTOR MOUNT PUMPS**

- Used in food, dairy, beverage, healthcare & cosmetics sectors
- Close-coupled to motor (unibloc); compact and economical
- Suitable for mounting onto standard IEC or NEMA motors
- Hygienic rubber impeller
- Long-life mechanical shaft seal
- All 316 grade stainless steel parts with high-surface finish

#### **MILK TANKER PUMPS**

- Specialized pumps for milk tanker loading at dairy farms
- Bulkhead-mounted for hydraulic drive
- Quick-release end-cover for winter drain-down and inspection
- Bypass option for effective CIP without the need to run the pump
- Hygienic rubber impeller

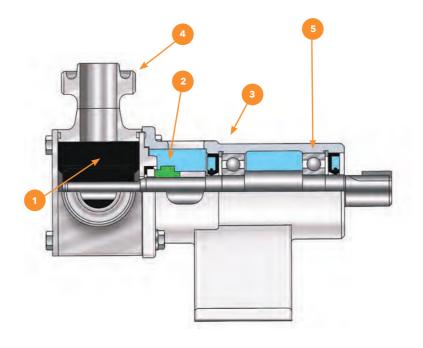
#### **DESIGN FEATURES**

- Dry self-priming
- All 316 stainless steel parts with high-surface finish
- Hygienic rubber impeller leaves no taste or odor
- Elastomers certified to US 3A standard 18-03
- Pump certified to US 3A standard 02-11
- Long-life mechanical shaft seal
- Easy strip-to-clean
- USDA approved
- Variety of port types and impeller material options

- Chemical-resistant 316 stainless steel parts
- Rugged heavy-duty construction
- Replaceable wearplates
- Passes even hard metal particles without stalling
- Long-life mechanical shaft seal
- Variety of shaft seal options
- 3A variants must be specified with HYG neoprene or EPDM
- Port options tri-clamp, IDF, 3A, DIN 11851
- EPDM/nitrile certified to EN1935:2004

#### **FLEXIBLE IMPELLER**

	MODEL 282	XO (30550)	MODEL 283	XO (30560)	MODEL 284	IXO (30570)	MODEL 285	XO (30580)	MODEL 28	36X0 (N/A)
SIZE	SIZE 40		80		200		370		500	
MOUNTING	Pedestal	Head Kit	Pedestal	Head Kit	Pedestal	Head Kit	Pedestal	Head Kit	Pedestal	Head Kit
MAX FLOW RATE	15.3 GPM (58 LPM)	15.3 GPM (58 LPM)	33.8 GPM (128 LPM)	33.8 GPM (128 LPM)	59.5 GPM (225 LPM)	59.5 GPM (225 LPM)	96 GPM (365 LPM)	96 GPM (365 LPM)	132 GPM (500 LPM)	132 GPM (500 LPM)
MAX PRESSURE	43 psi (3 bar)	43 psi (3 bar)	65 psi (4.5 bar)	65 psi (4.5 bar)	65 psi (4.5 bar)	65 psi (4.5 bar)	43 psi (3 bar)	43 psi (3 bar)	58 psi (4 bar)	58 psi (4 bar)
MAX SPEED	2500 rpm	2500 rpm	2500 rpm	2500 rpm	1800 rpm	1800 rpm	1500 rpm	1500 rpm	1500 rpm	1500 rpm
PORTS	1" (25mm)	1" (25mm)	1" (25mm)	1" (25mm)	1-1/4" (38mm)	1-1/4" (38mm)	2" (51mm)	2" (51mm)	2-1/4" (63mm)	2-1/4" (63mm)
LIQUID TEMPERATURE				Neoprene	- 149°F (65°C	:), EPDM - 248	°F (120°C)			
VISCOSITY	1-50,000 Cp									
DIMENSIONS	5.75" high x 6.5" long x 4.5" wide	4.5" high x 4.5" long x 4.5" wide	6.25" high x 8.5" long x 5" wide	5" high x 5.25" long x 5" wide	7" high x 10.25" long x 6.25" wide	6.25" high x 6.5" long x 6.25" wide	8.5" high x 13" long x 7.25" wide	8.5" high x 7.5" long x 7.25" wide	8.75" high x 18.75" long x 7.5" wide	7.5" high x 9" long x 7.5" wide
DIMENSIONS	(146mm x 165mm x 114mm)	(114mm x 114mm x 114mm)	(159mm x 216mm x 127mm)	(127mm x 133mm x 127mm)	(178mm x 260mm x 159mm)	(159mm x 165mm x 159mm)	(216mm x 330mm x 184mm)	(216mm x 191mm x 184mm)	(222mm x 476mm x 191mm)	(191mm x 229mm x 191mm)
BARESHAFT WEIGHT	6.4lb (2.9kg)	5.5lb (2.5kg)	9.7lb (4.4kg)	7.7lb (3.5kg)	20lb (9.1kg)	14.5lb (6.6kg)	32lb (14.7kg)	22lb (10kg)	48.5lb (22kg)	33lb (15kg)



#### **CONSTRUCTION DETAILS**

- Food-grade rubber impeller available in neoprene, EPDM, and nitrile options which fully conform to today's stringent hygienic standards.

  Wide variety of long-life, interchangeable seal types to suit many.
- 2. Wide variety of long-life, interchangeable seal types to suit many applications, making service & maintenance easy.
- Choice of head kit or pedestal bearing housing satisfies the individual's requirement for unitization on larger models.
   Bulkhead- mounted pumps are available if the option of fitting to hydraulic drive is required.
- 4. Range of port options for maximum flexibility.
- 5. Long-life, high-specification bearings give over 1 million hours of life on a typical duty.

STAINLESS STEEL SANITARY



### 28200 Series Stainless Steel Pedestal Pump & 28220 Head Kit Pump











#### **FEATURES**

- Self-primes from dry up to 7.8' (2.4m)
- Flows up to 10.5 GPM (40 LPM)
- Pressure up to 43.5 psi (3 bar)
- Handles soft solids 0.3" (8 mm) maximum diameter
- Certified to US 3A standard 02-11

#### **SPECIFICATIONS**

MAX PRESSURE	Standard - 36 psi (2.5 bar) High - 58 psi (4 bar)
PODTS	Model 28200 - 1" (25mm) tri-clamp, 1" (25mm) IDF/ISS, 1" (25mm) RJT to BS1864
PORTS	Model 28220 - 1" (25mm) 3A bevel seat, 1" (25mm) DIN11851, 1" (25mm) SMS 1145
PUMP HEAD	Stainless steel 316, machined interior and electro-polished exterior finish
SHAFT	Stainless steel 316
SEAL	Carbon/ceramic mechanical face seal, tungsten carbide/ceramic hard faced seal, flushed options for crystalizing fluids
	Food grade nitrile elastomer
BEARINGS	Twin single row, ball type
END COVER	Stainless steel 316
IMPELLER	3A food grade neoprene or EDPM
WEIGHT	6.4lb (2.9kg)

#### 28300 Series Stainless Steel Pedestal Pump & 28320 Head Kit Pump

Handles viscosities up to 50,000 cP

• Minimal shear to thixotropic fluids

Fits IEC standard motor B3/B14,

• Easy to service and maintain

EPDM/nitrile certified to

frame 80

EN1935:2004

• Clean-in-place (CIP) or easy strip clean

• Minimal shear to thixotropic fluids

• Easy to service and maintain

 EPDM/nitrile certified to EN1935:2004









#### **FEATURES**

- Self-primes from dry up to 16.4' (5m)
- Flows up to 21.2 GPM (80 LPM)
- Pressure up to 58 psi (4 bar)
- Handles soft solids 0.47" (12mm) maximum diameter
- Certified to US 3A standard 02-11
- Clean-in-place (CIP) or easy strip clean

**SPECIFICATIONS** 

MAX PRESSURE	Standard - 36 psi (2.5 bar) High - 58 psi (4 bar)
PORTS	Model 28300 - 1" (25mm) tri-clamp, 1" (25mm) IDF/ISS, 1" (25mm) RJT to BS1864
PORTS	Model 28320 - 1" (25mm) 3A bevel seat, 1" (25mm) (DIN11851), 1" (25mm) SMS 1145
PUMP HEAD	Stainless steel 316, machined interior and electro-polished exterior finish
SHAFT	Model 28300 - stainless steel 316 Model 28320 - stainless steel 316, shaft extension
SEAL	Carbon/ceramic mechanical face seal, tungsten carbide/caramic hard faced seal, flushed options for crystalizing fluids
	Food grade nitrile elastomer
BEARINGS	Model 28300 - greased ball bearings with epoxy-coated, cast iron housing
DEARINGS	Model 28320 - uses motor bearings with epoxy-coated, cast iron motor adapter
END COVER	Stainless steel 316
IMPELLER	3A neoprene or EDPM
WEIGHT	Model 28300 - 7.7lb (3.5kg) Model 28320 - 9.7lb (4.4kg)

### 28400 Series Stainless Steel Pedestal Pump & 28420 Head Kit Pump













#### **FEATURES**

- Self-primes from dry up to 16.4' (5m)
- Flows up to 52.8 GPM (200 LPM)
- Pressure up to 58 psi (4 bar)
- Handles soft solids 0.63" (16 mm) maximum diameter
- Certified to US 3A standard 02-11
- Clean-in-place (CIP) or easy strip clean
- Handles viscosities up to 50,000 cP
- Minimal shear to thixotropic fluids
- Fits IEC standard motor B3/B14,
- frame 90 (model 28420)
- Easy to service and maintain
- EPDM/nitrile certified to EN1935:2004

MAX PRESSURE	Standard - 36 psi (2.5 bar) High - 58 psi (4 bar)		
	1-1/4" (38mm) tri-clamp		
	1-1/4" (38mm) IDF/ISS		
	1-1/4" (38mm) RJT to BS1864		
PORTS	1-1/4" (38mm) 3A bevel seat		
	1.6" (40mm) DIN11851		
	1-1/4" (38mm) SMS 1145		
PUMP HEAD	Stainless steel 316, machined interior and electro-polished exterior finish		
SHAFT	Model 28400 - stainless steel 316 Model 28420 - stainless steel 316, shaft extension		
SEAL	Carbon/ceramic mechanical face seal, tungsten carbide/caramic hard faced seal, flushed options for crystalizing fluids		
	Food grade nitrile elastomer		
BEARINGS	Model 28400 - greased ball bearings with epoxy-coated, cast iron housing		
	Model 28420 - uses motor bearings with epoxy-coated, cast iron motor adapter		
END COVER	Stainless steel 316		
IMPELLER	3A neoprene or EDPM		
WEIGHT	Model 28400 - 20lb (9.1kg) Model 28420 - 14.6lb (6.6kg)		

STAINLESS STEEL SANITARY



### 28500 Series Stainless Steel Pedestal Pump & 28520 Head Kit Pump















#### **FEATURES**

- Self-primes from dry up to 14.8' (4.5m)
- Flows up to 94 GPM (365 LPM)
- Pressure up to 43.5 psi (3 bar)
- Handles soft solids 0.7" (18mm) maximum diameter
- Certified to US 3A standard 02-11
- Clean-in-place (CIP) or easy strip clean
- Handles viscosities up to 50,000 cP
  - Minimal shear to thixotropic fluids
  - Fits IEC standard motor B3/B14, frame 80 (model 28520)
  - Easy to service and maintain
  - EPDM/nitrile certified to EN1935:2004

#### **SPECIFICATIONS**

	Ct	
MAX PRESSURE	Standard - 36 psi (2.5 bar) High - 43.5 psi (3 bar)	
	2" (51mm) tri-clamp	
	2" (51mm) IDF/ISS	
PORTS	2" (51mm) RJT to BS1864	
PURIS	2" (51mm) 3A bevel seat	
	1.97" (50mm) DIN11851	
	2" (51mm) SMS 1145	
PUMP HEAD	Stainless steel 316, machined interior and electro-polished exterior finish	
SHAFT	Model 28500 - stainless steel 316 Model 28520 - stainless steel 316, shaft extension	
SEAL	Carbon/ceramic mechanical face seal, tungsten carbide/caramic hard faced seal, flushed options for crystalizing fluids	
	Food grade nitrile elastomer	
BEARINGS	Model 28500 - greased ball bearings with epoxy-coated, cast iron housing	
BEAKINGS	Model 28520 - uses motor bearings with epoxy-coated, cast iron motor adapter	
END COVER	Stainless steel 316	
IMPELLER	3A neoprene or EDPM	
WEIGHT	Model 28500 - 32.4lb (14.7kg) Model 28520 - 22lb (10kg)	

### 28600 Series Stainless Steel Pedestal Pump & 28620 Head Kit Pump











#### **FEATURES**

- Self-primes from dry up to 16.4' (5m)
- Flows up to 137.4 GPM (520 LPM)
- Pressure up to 58 psi (4 bar)
- Handles soft solids 0.7" (18mm) maximum diameter
- Certified to US 3A standard 02-11
- Clean-in-place (CIP) or easy strip clean
- Handles viscosities up to 50,000 cP
- Minimal shear to thixotropic fluids
- Fits IEC standard motor B3/B14,
- Easy to service and maintain

frame 90 (model 28420)

MAX PRESSURE	Standard - 29 psi (2 bar) High - 72.1 psi (5 bar)		
	2-1/4" (57mm) tri-clamp		
	2-1/4" (57mm) IDF/ISS		
PORTS	2-1/4" (57mm) RJT to BS1864		
PORIS	2-1/4" (57mm) 3A bevel seat		
	2.6 (66mm) DIN11851		
	2-1/4" (57mm) SMS 1145		
PUMP HEAD	Stainless steel 316, machined interior and electro-polished exterior finish		
SHAFT	Model 28260 - stainless steel 316, shafextension Model 28620 - requires motor with special shaft		
SEAL	Carbon/ceramic mechanical face seal, tungsten carbide/caramic hard faced seal, flushed options for crystalizing fluids		
	Food grade nitrile elastomer		
BEARINGS	Model 28600 - greased ball bearings with epoxy-coated, cast iron housing		
BEAKINGS	Model 28620 - uses motor bearings with epoxy-coated, cast iron motor adapter		
END COVER	Stainless steel 316		
IMPELLER	3A neoprene		
WEIGHT	Model 28600 - 48.5lb (22kg) Model 28620 - 33lb (15kg)		

124

## 04 Flexible Impeller Pumps

STAINLESS STEEL SANITARY

### 30550 Series Sanitary Flexible Impeller Pump













#### **FEATURES**

- Flow rate: nominal 10.5 GPM (40 LPM)
- Self-priming from dry up to 7.8' (2.4m)
- Pressure up to 58 psi (4 bar)
- Handles soft solids 0.3" (8mm) maximum diameter
- Certified to US 3A standard 02-11
  - Clean-in-place (CIP) or easy strip clean
  - Handles viscosities up to 50,000 cP
  - Minimal shear to thixotropic fluids
  - Easy to service and maintain

#### **SPECIFICATIONS**

PUMP DESIGN	Pedestal pump, pump head, close-coupled		
PORTS	1" (25mm) ACME threads with bevel seat or clamp type		
MOTOR	60Hz - 115V AC, single phase, 1/4 HP, 1750 RPM, TEFC, C-face, 56 C-frame		
BODY	Stainless steel 316		
SHAFT	Pedestal - stainless steel 316 Pump head/close-coupled - stainless steel 316 motor		
SEAL	Mechanical carbon-on-ceramic or tungsten carbide, nitrile		
IMPELLER	Neoprene or EPDM		
WEIGHT	Pedestal - 5.5lb (2.5kg) Pump head - 7.5lb (3.4kg) Close-coupled - 36lb (16.3kg)		

### 30570 Series Sanitary Flexible Impeller Pump











#### **FEATURES**

- Flow rate nominal 51 GPM (193 LPM) at 1750 rpm
- Self-priming from dry up to 7.8' (2.4m)
- Handles soft solids 0.63" (16mm) maximum diameter

• Pressure up to 58 psi (4 bar)

- Certified to US 3A standard 02-11 • Clean-in-place (CIP) or easy strip clean
- Handles viscosities up to 50,000 cP

125

- Minimal shear to thixotropic fluids
- Easy to service and maintain
- **SPECIFICATIONS**

PUMP DESIGN	Pedestal pump, pump head, close-coupled		
PORTS	1-1/4" (38mm) ACME threads with bevel seat or clamp type		
MOTOR	60Hz - 230V and 460V AC, Three phase, 5 HP 1750 rpm, TEFC, C-face, 184 TC-frame, non-CE		
BODY	Stainless steel 316		
SHAFT	Stainless steel 316 Motor - stainless steel 316		
SEAL	Mechanical carbon-on-ceramic or tungsten carbide, nitrile		
IMPELLER	Neoprene or EPDM		
WEIGHT	Pedestal - 21lb (9.5kg) Pump head - 30lb (18.6kg) Close-coupled - 93.5lb (42.5kg)		

#### 30560 Series Sanitary Flexible Impeller Pump













#### **FEATURES**

- Flow rate: nominal 21.5 GPM (81 LPM) at 1750 rpm
- Self-priming from dry up to 7.8' (2.4m)
- Pressure up to 58 psi (4 bar)
- Handles soft solids 0.47" (12 mm) maximum diameter
- Certified to US 3A standard 02-11
- Clean-in-place (CIP) or easy strip clean
- Handles viscosities up to 50,000 cP
- Minimal shear to thixotropic fluids
- · Easy to service and maintain

#### **SPECIFICATIONS**

PUMP DESIGN	Pedestal pump, pump head, close-coupled		
PORTS	1" (25mm) ACME threads with bevel seat or clamp type		
MOTOR	60Hz - 115V and 230V AC, single phase, 1-1/4 HP, H145 TC-frame, C-face, 1740 rpm, TEFC, overload protected, capacitor start, non-CE		
BODY	Stainless steel 316		
SHAFT	Stainless steel 316 Motor - stainless steel 316		
SEAL	Mechanical carbon-on-ceramic or tungsten carbide, nitrile		
IMPELLER	Neoprene or EPDM		
WEIGHT	Pedestal - 8.5lb (3.9kg) Pump head - 12lb (5.5kg) Close-coupled - 56lb (25.4kg)		

### 30580 Series Sanitary Flexible Impeller Pump











#### **FEATURES**

- Flow rate nominal 105 GPM (397 LPM) at 1750 rpm
- Self-priming from dry up to 7.8' (2.4m)
- Pressure up to 58 psi (4 bar)
- Handles soft solids 0.7" (18mm) maximum diameter
- Certified to US 3A standard 02-11 • Clean-in-place (CIP) or easy strip clean
- Handles viscosities up to 50,000 cP
- Minimal shear to thixotropic fluids
- Easy to service and maintain

PUMP DESIGN	Pedestal pump		
PORTS	2" (51mm) ACME threads with bevel seat or clamp type		
BODY	Stainless steel 316		
SHAFT	Stainless steel 316		
SEAL	Mechanical carbon-on-ceramic or tungsten carbide, nitrile		
IMPELLER	Neoprene or EPDM		
WEIGHT	31lb (14.1kg)		

STAINLESS STEEL SANITARY

### 22060 Bulkhead/Milk Tanker Pump









#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
22060-10-5205	Yes	N/A	Sanitary neoprene	Flange, stainless

#### **FEATURES**

- Flow rate nominal 128 GPM (484 LPM)
- Self-priming from dry up to 7.8' (2.4m)
- Pressure up to 36.3 psi (2.5 bar)
- Handles soft solids 0.7" (18mm) maximum diameter
- Certified to US 3A standard 02-11
- Clean-in-place (CIP) or easy strip clean
- Minimal shear to thixotropic fluids
- Easy to service and maintain

#### **SPECIFICATIONS**

PORTS	2-1/4" (57mm) tri-clamp 2-1/4" (57mm) IDF/ISS 2-1/4" (57mm) RJT to BS1864 2-1/4" (57mm) 3A bevel seat 2.6" (66m) DIN11851 2-1/4" (57mm) SMS1145
BODY	Stainless steel 316
SHAFT	Stainless steel 316
SEAL	Carbon/ceramic mechanical, food grade nitrile elastomer
BEARINGS	Twin single row, ball type with stainless steel 316 housing
IMPELLER	3A food grade neoprene
WEIGHT	50lb (23kg)

#### 23930 Bulkhead/Milk Tanker Pump









#### **MODELS**

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
23930-5115	Yes	N/A	3A neoprene	Flange, stainless

#### **FEATURES**

- Flow rate nominal 185 GPM (700 LPM) at 1750 rpm
- Self-priming from dry up to 7.8' (2.4m)
- Pressure up to 21.7 psi (1.5 bar)
- Handles soft solids 0.7" (18mm) maximum diameter
- Certified to US 3A standard 02-11
- Clean-in-place (CIP) or easy strip clean
- Minimal shear to thixotropic fluids
- Easy to service and maintain

#### SPECIFICATIONS

SPECIFICATIONS		
PORTS	2-1/4" (57mm) tri-clamp 2-1/4" (57mm) IDF/ISS 2-1/4" (57mm) RJT to BS1864 2-1/4" (57mm) 3A bevel seat 2.6" (66m) DIN11851 2-1/4" (57mm) SMS1145	
BODY	Stainless steel 316	
SHAFT	Stainless steel 316	
SEAL	Carbon/ceramic mechanical, food grade nitrile elastomer	
BEARINGS	Twin single row, ball/roller type with stainless steel 316 housing	
IMPELLER	3A food grade neoprene	
WEIGHT	53lb (24kg)	

### 15170 Bulkhead/Milk Tanker Pump









#### **FEATURES**

- Flow rate up to 90 GPM (397 LPM)
- Self-priming from dry up to 7.8' (2.4m)
- Pressure up to 21.7 psi (1.5 bar)
- Handles soft solids 0.7" (18 mm) maximum diameter
- Certified to US 3A standard 02-11
- Clean-in-place (CIP) or easy strip clean
- Minimal shear to thixotropic fluids
- Easy to service and maintain

#### **SPECIFICATIONS**

PORTS	2" (51mm) ACME threads or 2" (51mm) tri-clamp	
BODY	Stainless steel 316	
SHAFT	Stainless steel 316	
SEAL	Carbon/ceramic mechanical type, food grade nitrile elastomer	
BEARINGS	Twin single row, ball type with stainless steel 316 housing	
IMPELLER	3A food grade neoprene	
WEIGHT	34lb (15.4kg)	

MODEL#	CE	VOLTAGE	IMPELLER	STYLE
15170-7365	Yes	N/A	Sanitary neoprene	2" (51mm) ACME threads
15170-0015	Yes	N/A	Sanitary neoprene	2" (51mm) clamp





53270 SERIES						
MODEL#	CE	VOLTAGE	IMPELLER	STYLE		
53270-2011	Yes	N/A	Neoprene	Head kit		
53270-2013	Yes	N/A	Nitrile	Head kit		

1673 BRONZE PEDESTAL FLEXIBLE IMPELLER PUMP						
MODEL#	CE	VOLTAGE	IMPELLER	STYLE		
1673-1001	Yes	N/A	Neoprene	Pedestal		
1673-1003	Yes	N/A	Nitrile	Pedestal		

18610 BRONZE UTILITY PUMP						
MODEL#	CE	VOLTAGE	IMPELLER	STYLE		
18610-0001	No	115V AC	Neoprene	ODP motor		
18610-0003	No	115V AC	Nitrile	ODP motor		
18610-0004	No	115V AC	FKM	ODP motor		
18610-0271	No	115V AC	Neoprene	TEFC motor		
18610-0273	No	115V AC	Nitrile	TEFC motor		
18610-0274	No	115V AC	FKM	TEFC motor		

6400 BRONZE PEDESTAL PUMP						
MODEL#	CE	VOLTAGE	IMPELLER	STYLE		
6400-0004	Yes	N/A	Neoprene	Pedestal		
6400-0008	Yes	N/A	Natural rubber	Pedestal		
6400-0051	Yes	N/A	Neoprene	Pedestal		
6400-0051	Yes	N/A	Neoprene	Pedestal		

11810 BRONZE AC UTILITY PUMP					
MODEL#	CE	VOLTAGE	IMPELLER	STYLE	
11810-0001	No	115V AC	Neoprene	ODP motor	
11810-0003	No	115V AC	Nitrile	ODP motor	
11810-0011	No	115V AC	Neoprene	TEFC motor	
11810-0013	No	115V AC	Nitrile	TEFC motor	

18370 BRONZE PEDESTAL PUMP & 52270 SERIES						
MODEL#	CE	VOLTAGE	IMPELLER	STYLE		
18370-0001	Yes	N/A	Neoprene	Pedestal, bronze		
18370-0003	Yes	N/A	Nitrile	Pedestal, bronze		
52270-2011	Yes	N/A	Neoprene	Pedestal, bronze		
52270-2003	Yes	N/A	Nitrile	Pedestal, bronze		
52270-0011	Yes	N/A	Neoprene	Pedestal, bronze		
52270-0003	Yes	N/A	Nitrile	Pedestal, bronze		

2760 BRONZE PEDESTAL PUMP						
MODEL#	CE	VOLTAGE	IMPELLER	STYLE		
2760-0001	Yes	N/A	Neoprene	Pedestal		
2760-0003	Yes	N/A	Nitrile	Pedestal		

51510 & 51520 SERIES						
MODEL#	CE	VOLTAGE	IMPELLER	STYLE		
51510-2001	Yes	N/A	Neoprene	Pedestal, bronze		
51510-9001	Yes	N/A	Neoprene	Pedestal, bronze		
51520-2001	Yes	N/A	Neoprene	Pedestal, bronze		
51520-9001	Yes	N/A	Neoprene	Pedestal, bronze		

2620 BRONZE PEDESTAL PUMP						
MODEL#	CE	VOLTAGE	IMPELLER	STYLE		
2620-1101	Yes	N/A	Neoprene	Pedestal		
2620-1103	Yes	N/A	Nitrile	Pedestal		

52040 & 52580 SERIES						
MODEL#	CE	VOLTAGE	IMPELLER	STYLE		
52040-2001	Yes	N/A	Neoprene	Pedestal, bronze		
52040-2003	Yes	N/A	Neoprene	Pedestal, bronze		
52040-2021	Yes	N/A	Neoprene	Pedestal, bronze		
52580-2001	Yes	N/A	Neoprene	Pedestal, bronze		
52580-2003	Yes	N/A	Nitrile	Pedestal, bronze		
52580-2021	Yes	N/A	Neoprene	Pedestal, bronze		
52580-9001	Yes	N/A	Neoprene	Pedestal, bronze		
52580-9003	Yes	N/A	Nitrile	Pedestal, bronze		
52580-9021	Yes	N/A	Neoprene	Pedestal, bronze		

777 BRONZE PEDESTAL FLEXIBLE IMPELLER PUMP						
MODEL#	CE	VOLTAGE	IMPELLER	STYLE		
777-0001	Yes	N/A	Neoprene	Pedestal		
777-0003	Yes	N/A	Nitrile	Pedestal		
777-9001	Yes	N/A	Neoprene	Pedestal		
777-9003	Yes	N/A	Nitrile	Pedestal		
777-9051	Yes	N/A	Neoprene	Pedestal		

52200 & 52220 SERIES									
MODEL# CE VOLTAGE IMPELLER STYLE									
52200-2011	Yes	N/A	Neoprene	Pedestal, bronze					
52200-2003	Yes	N/A	Nitrile	Pedestal, bronze					
52200-2021	Yes	N/A	Neoprene	Pedestal, bronze					
52220-2011	Yes	N/A	Neoprene	Pedestal, bronze					
52220-2003	Yes	N/A	Nitrile	Pedestal, bronze					
52220-2021	Yes	N/A	Neoprene	Pedestal, bronze					

	11860 & 11870 SERIES										
MODEL#	CE	VOLTAGE	IMPELLER	STYLE							
11860-0005	Yes	12V DC	Neoprene	Pedestal, clutch							
11860-0006	Yes	24V DC	Neoprene	Pedestal, clutch							
11860-0045	Yes	12V DC	Neoprene	Pedestal, clutch							
11860-0051	Yes	24V DC	Neoprene	Pedestal, clutch							
11870-0005	Yes	12V DC	Neoprene	Pedestal, clutch							
11870-0006	Yes	24V DC	Neoprene	Pedestal, clutch							
11870-0045	Yes	12V DC	Neoprene	Pedestal, clutch							
11870-0046	Yes	24V DC	Neoprene	Pedestal, clutch							

	50580 SERIES										
MODEL#	CE	VOLTAGE	IMPELLER	STYLE							
50580-2001	Yes	12V DC	Nitrile	Clutch, bronze							
50580-2101	Yes	24V DC	Nitrile	Clutch, bronze							
50580-2201	Yes	12V DC	Nitrile	Clutch, bronze							
50580-2301	Yes	24V DC	Nitrile	Clutch, bronze							
50580-9001	Yes	12V DC	Nitrile	Clutch, bronze							
50580-9101	Yes	24V DC	Nitrile	Clutch, bronze							
50580-9201	Yes	12V DC	Nitrile	Clutch, bronze							
50580-9301	Yes	24V DC	Nitrile	Clutch, bronze							

		50200	& 50220 SERIES	
MODEL#	CE	VOLTAGE	IMPELLER	STYLE
50200-2011	Yes	12V DC	Nitrile	Clutch, bronze
50200-2111	Yes	24V DC	Nitrile	Clutch, bronze
50200-2211	Yes	12V DC	Nitrile	Clutch, bronze
50200-2311	Yes	24V DC	Nitrile	Clutch, bronze
50220-0011	Yes	12V DC	Nitrile	Clutch, bronze
50220-0111	Yes	24V DC	Nitrile	Clutch, bronze
50220-0211	Yes	12V DC	Nitrile	Clutch, bronze
50220-0311	Yes	24V DC	Nitrile	Clutch, bronze

	18330 & 50270 SERIES										
MODEL#	MODEL# CE VOLTAGE IMPELLER STYLE										
18330-0000	Yes	12V DC	Nitrile	Clutch, bronze							
18330-0001	Yes	24V DC	Nitrile	Clutch, bronze							
18330-0040	Yes	12V DC	Nitrile	Clutch, bronze							
18330-0041	Yes	24V DC	Nitrile	Clutch, bronze							
50270-0011	Yes	12V DC	Nitrile	Clutch, bronze							
50270-0311	Yes	24V DC	Nitrile	Clutch, bronze							
50270-0211	Yes	12V DC	Nitrile	Clutch, bronze							
50270-0031	Yes	24V DC	Nitrile	Clutch, bronze							
50270-2011	Yes	12V DC	Nitrile	Clutch, bronze							
50270-2111	Yes	24V DC	Nitrile	Clutch, bronze							
50270-2211	Yes	12V DC	Nitrile	Clutch, bronze							
50270-2311	Yes	24V DC	Nitrile	Clutch, bronze							

For the full range of Jabsco pumps series variants, including 305 series, please contact a sales representative.

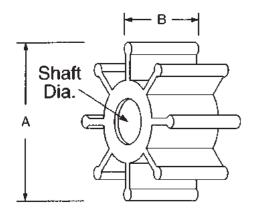
130

### 04 Flexible Impeller Pumps





#### Flexible Impeller Compounds



Jabsco flexible impellers are available in the following materials:

- Neoprene is the standard impeller material used in most flexible impeller pumps. It offers a wide range of chemical-resistant properties. Temperature range: see product specification chart.
- Nitrile impellers offer compatibility with oil products. It handles a wide range of oils, oil and water emulsions, diesel fuel, lower-fraction hydrocarbons, kerosene, and lubricating and machine-cutting oil. Lower temperatures affect priming ability and performance characteristics. Generally, nitrile performance is 10 percent below that of neoprene. Temperature range: 50°F (10°C) to 180°F (82.2°C).
- FKM impellers are recommended when pumping hydrocarbons, solvents and severely corrosive chemicals. FKM is not recommended for low-temperature or high-pressure applications. Temperature range: 60°F (15.6°C) to 180°F (82.2°C).

- 1 SLOTTED SHAFT
  2 THROUGH HOLE
  PIN DRIVE
  3 KEY DRIVE
  4 SINGLE
  FLAT DRIVE
  5 DOUBLE
  FLAT DRIVE
  6 DING DRIVE
  7 SPLINE
  DRIVE
  8 RIBBEDD
  SECURENT KEY
- Sanitary neoprene impellers are used in hygienic flexible impeller pumps for applications such as pumping food, beverage and pharmaceutical products. Temperature range: 45°F (7.2°C) to 165°F (73.9°C).
- Natural rubber impellers are used in cold-water applications. Temperature range: 22°F (-5.6°C) to 120°F (48.9°C).
- Sanitary EPDM impellers are used for elevated-temperature, hygienic applications up to 185°F (85°C). EPDM is compatible with some ketone solvents. Temperature range: 60°F (15.6°C) to 185°F (85°C).

#### Flexible Impeller Cross-Reference

IMPELLER#	SILHOUETTE	IMPELLER #	SILHOUETTE	IMPEL
4527-0001	G	6760-0003	0	8980-
-0003	G	7273-0001	G	8981-
4528-0001	D	-0003	G	-
-0003	D	-0004	G	8983-
4568-0001	K	7614-0002	K	-
-0003	K	-0005	K	-
4598-0001	M	8500-0005	AA	-
-003	K	8600-0002	V	8984-
5606-0001	G	-0003	V	9200-
-0003	G	-0005	V	-
-0004	G	8713-0005	U	-
5616-0001	G	8840-0002	Ν	-
5915-0001	N	-0004	N	11979-
5929-0001	K	-0005	Ν	12104
-0003	K	-0006	N	12326-
6056-0003	М	8963-0002	S	-
6174-0001	K	-0005	S	14281-
-0003	K	8980-0002	L	-
6303-0001	Н	-0003	L	-
-0003	Н	-0004	L	14282-

IPELLER#	SILHOUETTE	IMPELLER#	SILHOUETTE
80-0005	L	14282-0003	М
81-0002	М	-0004	M
-0005	М	14346-0002	Q
83-0002	Р	-0003	Q
-0003	Р	-0004	Q
-0004	Р	-0005	Q
-0005	Р	14609-0001	С
84-0005	R	-0003	С
00-0001	F	14750-0001	В
-0003	F	-0003	В
-0021	F	14787-0001	С
-0023	F	-0003	С
979-0001	М	14792-0001	А
104-0001	А	-0003	Α
326-0001	М	14868-0001	М
-0003	М	14874-0001	1
281-0001	K	-0003	1
-0003	K	-0004	1
-0004	K	17255-0003	D
282-0001	M	17273-0004	1

17370-0001 Q 17486-0001 H 17935-0001 Q 17936-0001 Q 17937-0001 Y 17956-0001 Y 18018-0001 O 18673-0001 I -0003 I 18786-0001 R -0003 R 18815-0001 L 18838-0001 W 18948-0001 X 21899-0005 U 22120-0001 K	IMP	ELLER#	SILHOUETTE
17935-0001 Q 17936-0001 Q 17937-0001 Y 17956-0001 Y 18018-0001 O 18673-0001 I -0003 I 18786-0001 R -0003 R 18815-0001 L 18838-0001 W 18948-0001 X 21899-0005 U	1737	70-0001	Q
17936-0001 Q 17937-0001 Y 17956-0001 Y 18018-0001 O 18673-0001 I -0003 I 18786-0001 R -0003 R 18815-0001 L 18838-0001 W 18948-0001 X 21899-0005 U	1748	86-0001	Н
17937-0001 Y 17956-0001 Y 18018-0001 O 18673-0001 I -0003 I 18786-0001 R -0003 R 18815-0001 L 18838-0001 W 18948-0001 X 21899-0005 U	1793	35-0001	Q
17956-0001 Y 18018-0001 O 18673-0001 I -0003 I 18786-0001 R -0003 R 18815-0001 L 18838-0001 W 18948-0001 X 21899-0005 U	1793	86-0001	Q
18018-0001 O 18673-0001 I -0003 I 18786-0001 R -0003 R 18815-0001 L 18838-0001 W 18948-0001 X 21899-0005 U	1793	37-0001	Υ
18673-0001 I -0003 I 18786-0001 R -0003 R 18815-0001 L 18838-0001 W 18948-0001 X 21899-0005 U	1795	6-0001	Υ
-0003 I 18786-0001 R -0003 R 18815-0001 L 18838-0001 W 18948-0001 X 21899-0005 U	1801	8-0001	0
18786-0001 R -0003 R 18815-0001 L 18838-0001 W 18948-0001 X 21899-0005 U	1867	73-0001	1
-0003 R 18815-0001 L 18838-0001 W 18948-0001 X 21899-0005 U		-0003	1
18815-0001 L 18838-0001 W 18948-0001 X 21899-0005 U	1878	86-0001	R
18838-0001 W 18948-0001 X 21899-0005 U		-0003	R
18948-0001 X 21899-0005 U	1881	5-0001	L
21899-0005 U	1883	88-0001	W
	1894	8-0001	Χ
22120-0001 K	2189	99-0005	U
	2212	20-0001	K

INSERT MATERIALS: BR = Bronze SS = Stainless Steel

IMPELLER#	MATERIALS	DRIVE	# OF BLADES	DIMEN	SIONS	SHAFT	INSERT	REMARKS
THE ELECTOR	IIIAL ERIALD	TYPE	and Diskuth	A	В	DIAMETER	MATERIALS	- REMARKO
SILHOUETTE A	l .							
1414-0001	Neoprene	4	6	1-1/4" (32mm)	0.47" (12mm)	5/16" (8mm)	BR	
-0003	Nitrile	4	6	1-1/4" (32mm)	0.47" (12mm)	5/16" (8mm)	BR	
12104-0001	Neoprene	2	6	1-1/4" (32mm)	0.47" (12mm)	5/16" (8mm)	BR	Onan (use 6-32 x 5/8 HDL's screw)
14792-0001	Neoprene	4	6	1-1/4" (32mm)	0.47" (12mm)	5/16" (8mm)	SS	
-0003	Nitrile	4	6	1-1/4" (32mm)	0.47" (12mm)	5/16" (8mm)	SS	
SILHOUETTE B	1							
14750-0001	Neoprene	4	8	1-1/4" (32mm)	0.47" (12mm)	5/16" (8mm)	BR	
-0003	Nitrile	4	8	1-1/4" (32mm)	0.47" (12mm)	5/16" (8mm)	BR	
SILHOUETTE C								
14609-0001	Neoprene	4	6	1-1/4" (32mm)	0.47" (12mm)	5/16" (8mm)	BR	
-0003	Nitrile	4	6	1-1/4" (32mm)	0.47 (12mm) 0.47" (12mm)	5/16" (8mm)	BR	
14787-0001	Neoprene	4	6	1-1/4" (32mm)	0.47 (12mm) 0.47" (12mm)	5/16" (8mm)	PL	
-0003	Nitrile	4	6	1-1/4" (32mm)	0.47" (12mm)	5/16" (8mm)	PL	
SILHOUETTE D			Ü	, . (02)	(1211111)	<i>or</i> 10 (011111)		
4528-0001	Neoprene	1 or 2	6	1.6" (40mm)	1/4" (6mm)	3/8" (10mm)	BR	Was AL - 24
-0003	Nitrile	1 or 2	6	1.6" (40mm)	1/4" (6mm)	3/8" (10mm)	BR	Was AL - 24, 37
17255-0003	Nitrile	N/A	6	1.6" (40mm)	1/4" (6mm)	1/4" (6mm)		Impeller molded on shaft
SILHOUETTE F								
9200-0001	Neoprene	4	10	1.6" (40mm)	1/4" (6mm)	5/16" (8mm)	PL	Was brass insert
-0003	Nitrile	4	10	1.6" (40mm)	1/4" (6mm)	5/16" (8mm)	PL	Was brass insert
-0021	Neoprene	4	10	1.6" (40mm)	1/4" (6mm)	5/16" (8mm)	BR	
-0023	Nitrile	4	10	1.6" (40mm)	1/4" (6mm)	5/16" (8mm)	BR	
SILHOUETTE G	i							
1133-0001	Neoprene	1 or 2	6	2" (51mm)	7/8" (22mm)	1/4" (6mm)	SS	
-0003	Nitrile	1 or 2	6	2" (51mm)	7/8" (22mm)	1/4" (6mm)	SS	
3398-0001	Neoprene	2	6	2" (51mm)	7/8" (22mm)	1/4" (6mm)	None	
-0003	Nitrile	2	6	2" (51mm)	7/8" (22mm)	1/4" (6mm)	None	
-0004	FKM	2	6	2" (51mm)	7/8" (22mm)	1/4" (6mm)	None	
4527-0001	Neoprene	2	6	2" (51mm)	7/8" (22mm)	5/16" (8mm)	None	
-0003	Nitrile	2	6	2" (51mm)	7/8" (22mm)	5/16" (8mm)	None	
5606-0001	Neoprene	6	6	2" (51mm)	7/8" (22mm)	1/4" (6mm)	SS	SS extended drive cup
-0003	Nitrile	6	6	2" (51mm)	7/8" (22mm)	1/4" (6mm)	SS	SS extended drive cup
-0004	FKM	6	6	2" (51mm)	7/8" (22mm)	1/4" (6mm)	SS	SS extended drive cup
5616-0001	Neoprene	6	6	2" (51mm)	7/8" (22mm)	1/4" (6mm)	BR	Brass extended drive cup
7273-0001	Neoprene	4	6	2" (51mm)	7/8" (22mm)	5/16" (8mm)	PL	
-0003	Nitrile	4	6	2" (51mm)	7/8" (22mm)	5/16" (8mm)	PL	
SILHOUETTE H	I							
6303-0001	Neoprene	4	6	2" (51mm)	7/8" (22mm)	5/16" (8mm)	PL	
-0003	Nitrile	4	6	2" (51mm)	7/8" (22mm)	5/16" (8mm)	PL	
17486-0001	Neoprene	6	6	2" (51mm)	7/8" (22mm)	1/4" (6mm))	BR	Brass extended drive cup

131



IMPELLER REPLACEMENT GUIDE

		C DRIVE # OF PLANES		SHAFT	INSERT			
IMPELLER#	MATERIALS	TYPE	# OF BLADES	A	В	DIAMETER	MATERIALS	REMARKS
ILHOUETTE I								
14874-0001	Neoprene	5	10	2" (51mm)	7/8" (22mm)	5/8" (16mm)	PL	
-0003	Nitrile	5	10	2" (51mm)	7/8" (22mm)	5/8" (16mm)	PL	
-0003	FKM	5	10	2" (51mm)	7/8" (22mm)	1/4" (6mm)	PL	
17273-0004	FKM	4	10	2" (51mm)	7/8" (22mm)	5/16" (8mm)	PL	
18673-0004	Neoprene	1 or 2	10	2" (51mm)	7/8" (22mm)	1/4" (6mm)	PL	Replaces 673-0001
-0003	Nitrile	1 or 2	10	2" (51mm)	7/8" (22mm)	1/4" (6mm)	PL	Replaces 673-0003
		1012	10	2 (3111111)	770 (2211111)	174 (011111)	1.5	Replaces 070 0000
ILHOUETTE K		_						
1210-0001	Neoprene	7	12	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	BR	
-0003	Nitrile	7	12	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	BR	
4568-0001	Neoprene	3	12	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	BR	
-0003	Nitrile	3	12	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	BR	
5929-0001	Neoprene	6	12	2-1/4" (57mm)	1-1/4" (32mm)	1/4" (6mm)	BR	SS drive cup
-0003	Nitrile	6	12	2-1/4" (57mm)	1-1/4" (32mm)	1/4" (6mm)	BR	SS drive cup
6174-0001	Nitrile	6	12	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	SS	SS drive cup
-0003	Nitrile	6	12	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	SS	SS drive cup
7614-0002	EPDM	5	12	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	PL	Sanitary
-0005	Neoprene	5	12	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	PL	Sanitary
14281-0001	Neoprene	5	12	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	PL	
-0003	Nitrile	5	12	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	PL	
-0004	FKM	5	12	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	PL	
22120-0001	Neoprene	7	12	2-1/4" (57mm)	2" (51mm)	5/8" (16mm)	BR	
ILHOUETTE L								
3085-0001	Neoprene	7	10	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	BR	
8980-0001	Neoprene	5	10	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	PL	
-0002	EPDM	5	10	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	PL	Sanitary
-0003	Nitrile	5	10	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	PL	
-0004	FKM	5	10	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	PL	
-0005	Neoprene	5	10	2-1/4" (57mm)	1-1/4" (32mm)	5/8" (16mm)	PL	Sanitary
18815-0001	Neoprene	6	10	2-1/4" (57mm)	1-1/4" (32mm)	1/4" (6mm)	BR	SS drive cup
ILHOUETTE N	ı							
920-0001	Neoprene	7	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	BR	
-0003	Nitrile	7	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	BR	
	Natural							For temperature range
-0008	rubber	7	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	BR	27°F (-3°C) to 120°F (49°C)
964-0001	Neoprene	7	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	PL	
-0003	Nitrile	7	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	PL	
4598-0001	Neoprene	3	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	BR	
-0003	Nitrile	3	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	BR	
6056-0003	Nitrile	6	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	BR	SS drive cup
8981-0002	EPDM	5	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	PL	Sanitary
-0005	Neoprene	5	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	PL	Sanitary
11979-0001	Neoprene	7	8	2-9/16" (65mm)	1-7/16" (36mm)	5/8" (16mm)	BR	
12326-0001	Neoprene	6	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	SS	SS drive cup
-0003	Nitrile	6	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	SS	SS drive cup
14282-0001	Neoprene	5	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	PL	
-0003	Nitrile	5	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	PL	

MATERIALS	DRIVE		DIMENSIONS		SHAFT	INSERT	DEM ADIZE		
	TYPE	# OF BLADES	A	В	DIAMETER	MATERIALS	REMARKS		
Neoprene	7	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	BR			
EPDM	5	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	PL	Sanitary		
Nitrile	5	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	PL			
FKM	5	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	PL			
Neoprene	5	8	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	PL	Sanitary		
SILHOUETTE O									
Neoprene	7	9	3-1/4" (83mm)	2-1/4" (57mm)	1" (25mm)	PL			
·	7					BR			
Nitrile	7	9	3-1/4" (83mm)	2-1/4" (57mm)	1" (25mm)	BR			
Natural rubber	7	9	3-1/4" (83mm)	2-1/4" (57mm)	1" (25mm)	BR			
Nitrile	7	9	3-1/4" (83mm)	3-1/4" (83mm)	1" (25mm)	BR			
Neoprene	7	9	3-1/4" (83mm)	3-1/4" (83mm)	1" (25mm)	SS	SS inserted 331-0001		
Nitrile	5	10	3-1/4" (83mm)	2-1/4" (57mm)	1" (25mm)	PL			
FKM	5	10	3-1/4" (83mm)	2-1/4" (57mm)	1" (25mm)	PL			
Neoprene	5	10	3-1/4" (83mm)	2-1/4" (57mm)	1" (25mm)	PL	Sanitary		
EPDM	5	12	3-1/4" (83mm)	2-1/4" (57mm)	1" (25mm)	PL	Sanitary		
Nitrile	5	12	3-1/4" (83mm)	2-1/4" (57mm)	1" (25mm)	PL	,		
FKM	5	12	3-1/4" (83mm)	2-1/4" (57mm)	1" (25mm)	PL			
Neoprene	5	12	3-1/4" (83mm)	2-1/4" (57mm)	1" (25mm)	PL	Sanitary		
Neoprene	5	12	3-1/4" (83mm)	3-1/4" (83mm)	1" (25mm)	PL			
Neoprene	7	12	3-1/4" (83mm)	2-1/4" (57mm)	1" (25mm)	BR			
Neoprene	7	12	3-1/4" (83mm)	3-1/4" (83mm)	1" (25mm)	BR			
Neoprene	5	9	4-5/8" (117mm)	3-1/4" (83mm)	1" (25mm)	PL	Sanitary		
Neoprene	5	9	4-5/8" (117mm)	3-1/4" (83mm)	1" (25mm)	PL			
Nitrile	5	9	4-5/8" (117mm)	3-1/4" (83mm)	1" (25mm)	PL			
FKM	5	9	4-5/8" (117mm)	3-1/4" (83mm)	1" (25mm)	PL			
EPDM	5	9	4-5/8" (117mm)	3-1/4" (83mm)	1" (25mm)	PL	Sanitary		
Neoprene	5	9	4-5/8" (117mm)	3-1/4" (83mm)	1" (25mm)	PL	Sanitary		
J									
Neoprene	7	13	5" (127mm)	4" (102mm)	1-1/4" (32mm)	BR			
Neoprene	5	13	5" (127mm)	4" (102mm)	1-1/4" (32mm)	PL	Sanitary		
	5	13	5" (127mm)	5-1/4" (133)	1-1/4" (32mm)	PL	Sanitary		
	EPDM Nitrile FKM Neoprene Neoprene Nitrile Natural rubber Nitrile Neoprene Nitrile FKM Neoprene EPDM Nitrile FKM Neoprene	Neoprene         7           EPDM         5           Nitrile         5           FKM         5           Neoprene         5           Neoprene         7           Neoprene         7           Nitrile         7           Nitrile         7           Neoprene         7           Nitrile         5           FKM         5           Neoprene         5           Neoprene         5           Neoprene         7           Neoprene         5           Neoprene         5	Neoprene       7       8         EPDM       5       8         Nitrile       5       8         FKM       5       8         Neoprene       5       8         Neoprene       7       9         Neoprene       7       9         Nitrile       7       9         Nitrile       7       9         Nitrile       7       9         Nitrile       5       10         FKM       5       10         Neoprene       5       10         EPDM       5       12         Neoprene       5       12         Neoprene       5       12         Neoprene       7       12         Neoprene       7       12         Neoprene       5       9         Neoprene       5       9         EPDM       5       9         EPDM       5       9         Neoprene       5       9         Neoprene       5       9         Neoprene       7       13	Neoprene 7 8 2-9/16" (65mm) EPDM 5 8 2-9/16" (65mm) Nitrile 5 8 2-9/16" (65mm) FKM 5 8 2-9/16" (65mm) Neoprene 5 8 2-9/16" (65mm) Neoprene 7 9 3-1/4" (83mm) Neoprene 7 9 3-1/4" (83mm) Nitrile 7 9 3-1/4" (83mm) Natural rubber 7 9 3-1/4" (83mm) Nitrile 7 9 3-1/4" (83mm) Neoprene 5 10 3-1/4" (83mm) FKM 5 10 3-1/4" (83mm) Neoprene 5 10 3-1/4" (83mm) Neoprene 5 12 3-1/4" (83mm) FKM 5 12 3-1/4" (83mm) Neoprene 5 12 3-1/4" (83mm) Neoprene 5 12 3-1/4" (83mm) Neoprene 7 12 3-1/4" (817mm) Neoprene 5 9 4-5/8" (117mm) FKM 5 9 4-5/8" (117mm) FKM 5 9 4-5/8" (117mm) Neoprene 7 9 4-5/8" (117mm)	Neoprene 7 8 2-9/16" (65mm) 2" 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PL Neoprene 7 9 3-1/4* (83mm) 2-1/4* (57mm) 1* (25mm) BR Nitrile 7 9 3-1/4* (83mm) 2-1/4* (57mm) 1* (25mm) BR Natural 7 9 3-1/4* (83mm) 2-1/4* (57mm) 1* (25mm) BR Nitrile 7 9 3-1/4* (83mm) 3-1/4* (83mm) 1* (25mm) BR Nitrile 7 9 3-1/4* (83mm) 3-1/4* (83mm) 1* (25mm) BR Neoprene 7 9 3-1/4* (83mm) 3-1/4* (83mm) 1* (25mm) BR Neoprene 5 10 3-1/4* (83mm) 2-1/4* (57mm) 1* (25mm) PL FKM 5 10 3-1/4* (83mm) 2-1/4* (57mm) 1* (25mm) PL Neoprene 5 10 3-1/4* (83mm) 2-1/4* (57mm) 1* (25mm) PL Neoprene 5 12 3-1/4* (83mm) 2-1/4* (57mm) 1* (25mm) PL FKM 5 12 3-1/4* (83mm) 2-1/4* (57mm) 1* (25mm) PL Nitrile 5 12 3-1/4* (83mm) 2-1/4* (57mm) 1* (25mm) PL Nitrile 5 12 3-1/4* (83mm) 2-1/4* (57mm) 1* (25mm) PL Nitrile 5 12 3-1/4* (83mm) 2-1/4* (57mm) 1* (25mm) PL Nitrile 5 12 3-1/4* (83mm) 2-1/4* (57mm) 1* (25mm) PL Neoprene 5 12 3-1/4* (83mm) 2-1/4* (57mm) 1* (25mm) PL Neoprene 7 12 3-1/4* (83mm) 3-1/4* (83mm) 1* (25mm) PL Neoprene 7 12 3-1/4* (83mm) 3-1/4* (83mm) 1* (25mm) PL Neoprene 7 12 3-1/4* (83mm) 3-1/4* (83mm) 1* (25mm) PL Neoprene 7 12 3-1/4* (83mm) 3-1/4* (83mm) 1* (25mm) PL Neoprene 5 9 4-5/8* (117mm) 3-1/4* (83mm) 1* (25mm) PL Neoprene 5 9 4-5/8* (117mm) 3-1/4* (83mm) 1* (25mm) PL Neoprene 5 9 4-5/8* (117mm) 3-1/4* (83mm) 1* (25mm) PL FKM 5 9 4-5/8* (117mm) 3-1/4* (83mm) 1* (25mm) PL Neoprene 5 9 4-5/8* (117mm) 3-1/4* (83mm) 1* (25mm) PL Neoprene 5 9 4-5/8* (117mm) 3-1/4* (83mm) 1* (25mm) PL Neoprene 5 9 4-5/8* (117mm) 3-1/4* (83mm) 1* (25mm) PL Neoprene 5 9 4-5/8* (117mm) 3-1/4* (83mm) 1* (25mm) PL Neoprene 7 13 5* (127mm) 4* (102mm) 1* (125mm) PL Neoprene 5 9 4-5/8* (117mm) 3-1/4* (83mm) 1* (25mm) PL Neoprene 7 13 5* (127mm) 4* (102mm) 1* (124mm) PL		

 ${\sf INSERT\,MATERIALS:\,BR=Bronze} \qquad {\sf SS=Stainless\,Steel} \qquad {\sf PL=Epoxy\,Plastic}$ 

134

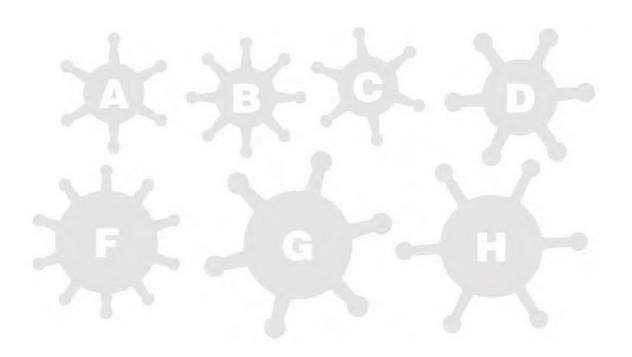
# 04 Flexible Impeller Pumps IMPELLER REPLACEMENT GUIDE

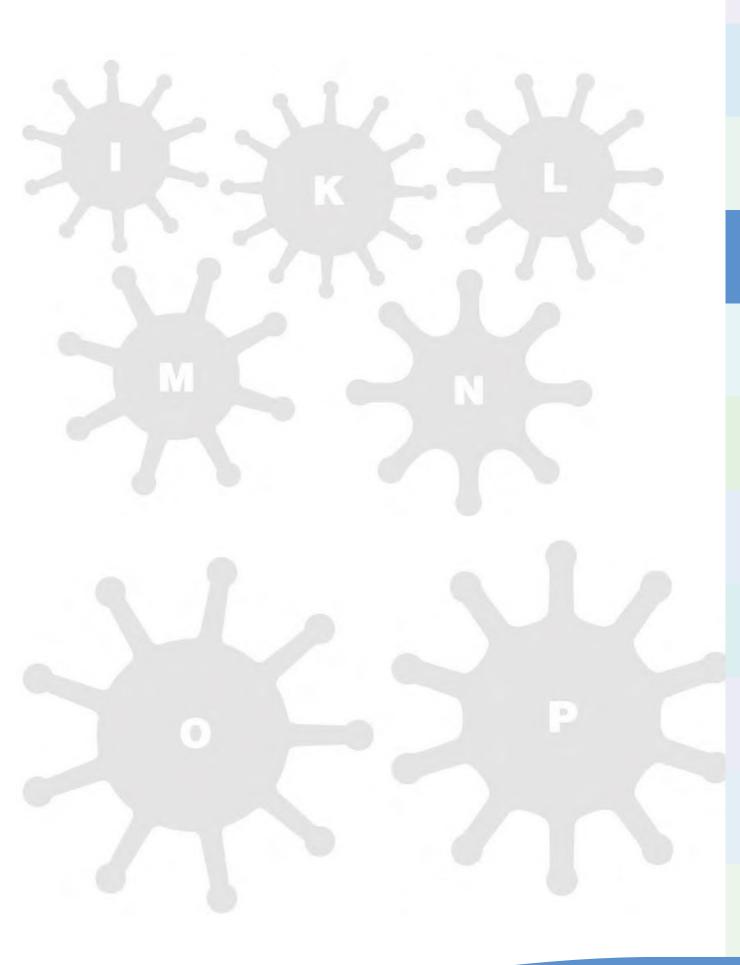


		DRIVE	# 05 DI 4 DEC	DIMEN	ISIONS	SHAFT	INSERT	PERMANA	
IMPELLER#	MATERIALS	TYPE	# OF BLADES	A	В	DIAMETER	MATERIALS	REMARKS	
SILHOUETTE V									
8600-0003	Nitrile	5	12	4-5/8" (117mm)	3-1/4" (83mm)	1" (25mm)	PL		
-0005	Neoprene	5	12	4-5/8" (117mm)	3-1/4" (83mm)	1" (25mm)	PL	Sanitary	
SILHOUETTE V	I								
18838-0001	Neoprene	3	12	2-7/16" (62mm)	1-1/4" (32mm)	5/8" (16mm)	BR		
SILHOUETTE X									
18948-0001	Neoprene	3	12	2-9/16" (65mm)	1-5/8 (41mm)	5/8" (16mm)	BR		
SILHOUETTE Y									
17937-0001	Neoprene	7	10	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	BR		
17956-0001	Neoprene	6	10	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	BR	SS drive cup, replaces 6056-0001	
17981-0005	Neoprene	5	10	2-9/16" (65mm)	2" (51mm)	5/8" (16mm)	PL	Sanitary	
SILHOUETTE A	A								
8500-0005	Neoprene	5	12	5" (127mm)	4" (102mm)	1-1/4" (32mm)	PL	Sanitary	

 ${\tt INSERT\,MATERIALS:\,BR=Bronze} \qquad {\tt SS=Stainless\,Steel} \qquad {\tt PL=Epoxy\,Plastic}$ 

Flexible Impeller Actual-Size Reference

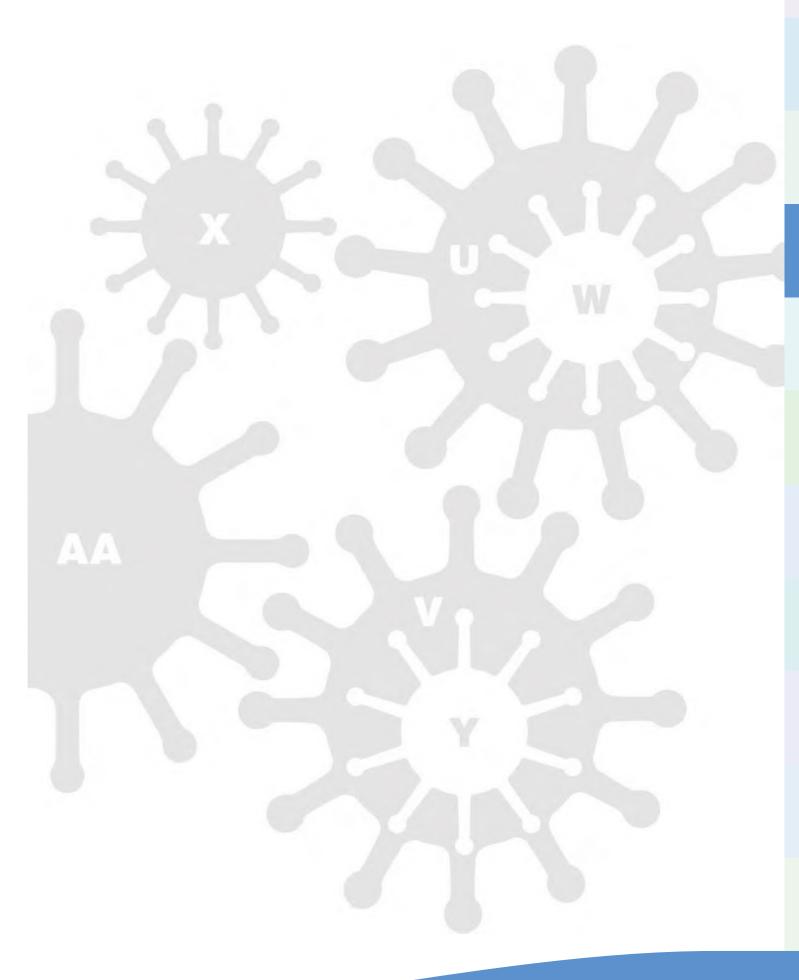




# 04 Flexible Impeller Pumps IMPELLER REPLACEMENT GUIDE

Flexible Impeller Actual-Size Reference







## 05 Hand Pumps

PORTABLE & MANUAL





#### **Amazon Warrior**















#### **FEATURES**

- Robust design particularly suited to work sites or any installation where heavy-duty use is anticipated
- 18" (457mm) stainless steel handle assists sustained high outputs of up to 35 GPM (135 LPM)
- Double diaphragm design gives maximum efficiency and added safety

- 1-1/2" (38mm) ports give large-solids-handling ability
- Can function on one diaphragm in an emergency
- Epoxy-coated aluminum housing
- Self-priming up to 20' (6m)

#### **SPECIFICATIONS**

	MODEL 29280-0000	
BODY	Epoxy-painted alloy	
ELASTOMERS	Nitrile	
PORTS	1-1/2" (38mm) hose barb	

### **Manual Operated Hand Pumps**















#### **FOR INDUSTRIAL MARKETS**

Ultimate heavy-duty hand pump for utility and emergency uses. Made with longlife brass cylinders, high-quality oil-resistant plungers, and impact-absorbing end caps. Units are supplied with varying lengths of hose.

#### **FEATURES**

- Drain, fill or top off engine and gearbox oil
- Overcomes problem of hard-to-reach drain plugs and filler caps

#### **SPECIFICATIONS**

	MODEL 34060-0010	MODEL 33799-0000	MODEL 33760-0000	MODEL 33745-0000
STROKES PER GALLON	40	26	15	7
CYLINDER DIAMETER	1-1/4" (32mm)	1-1/4" (32mm)	1-1/4" (32mm)	1-3/4" (44mm)
LENGTH	10" (254mm)	12" (305mm)	17" (432mm)	22-1/2" (572mm)
CONNECTION SIZE	1/2" (13mm)	1/2" (13mm)	1/2" (13mm)	1" (25mm)
CERTIFICATIONS	CE	CE	CE	CE
WEIGHT	1lb (0.45kg)	2lb (0.9kg)	2.5lb (1.1kg)	4lb (1.8kg)

#### Portable Pumps







#### FOR INDUSTRIAL MARKETS

Constructed of sturdy ABS plastic with comfort-grip handle, providing smooth, firm strokes. Available in 24" (610mm) with hose and 48" (1220mm) with hose.

#### **SPECIFICATIONS**

	MODEL 165	MODEL 168
CAPACITY	8 GPM (30 LPM)	10 GPM (38 LPM)
HOSE SIZE ID	1-1/8" (29mm)	1-1/8" (29mm)
DIMENSIONS	24" (610mm) with 2' (0.6m) of 1-1/8" (29mm) hose	48" (1220mm) with 4' (1.2m) of 1-1/8" (29mm) hose

MODEL#	CE	POWER	OPTIONS
165	Yes	8 GPM (30 LPM)	24" (610mm) hose
168	Yes	10 GPM (38 LPM)	48" (1220mm) hose



## 06 Rotary Lobe Pumps





## 55 Series Ultra Hygienic Positive Displacement Pump









### **FOR ULTRA HYGIENIC MARKETS**

The ultimate hygienic rotary positive displacement pump designed without compromise to fulfill even the most critical customer demands in clean-ability, sterilize-ability and bacterial tightness. This 316L stainless steel design uses bi-wing or five-lobe rotor designs specifically utilized to achieve the very lowest shear rate and product degradation characteristics.

### **DESIGN FEATURES**

Ultimate hygienic standards: Tested and approved to the EHEDG (European Hygienic Equipment Design Group), CIP, SIP and bacterial tightness protocols. Full compliance with 3A sanitary standards 18-03 and 02-10, and utilizes materials that meet the requirements of the FDA title 21, section 177.1550.

Cleaner by design: external rotor retention along with gasket-type joints in place of O-rings reduce the number of potential product entrapment areas. In addition, the shaft seals are pulled forward fully in the product zone, all of which adds up to the ultimate in clean-ability every time.

Low product shearing: The bi-wing and five-lobe rotor designs ensure high volumetric efficiency on low viscosity products, resulting in low shear rates and low product damage.

Rugged design: This pump design utilizes extremely large shaft diameters mounted in high specification taper roller bearings. These give maximum shaft stiffness to ensure no galling, thus maintaining the pump's CIP and SIP capabilities.

## **SPECIFICATIONS**

MAX SPEED	Model 55210 and 55320 - 1500 RPM Model 55420 - 1000 RPM
MAX PRESSURE	Model 55210 - 203 psi (14 bar) Model 55320 and 55420 - 290 (20 bar)
ELASTOMERS	USP Class VI, EPDM, FKM and PTFE product contact joints all in compounds conforming to the FDA CFR title 21 section 177.1550.
CONNECTIONS	US and European standards including tri-clamp. All pumps available in two different sizes.
LIQUID TEMPERATURE RANGE	-22°F (-30°C) to 284°F (140°C)
	Front-loaded, single mechanical face-type seals of hygienic design. Materials include carbon and silicon carbide.
SEAL	Low-pressure flushed seals utilize the same single mechanical seal with an additional housing. A low,pressure flush liquid washes away crystallizing products or liquids which "skin over".
	Double mechanical seals utilize all the components from single seals. Used for hazardous, toxic, highly abrasive or sterile products.
VISCOSITY	1-1 million
CERTIFICATIONS	3.1B material certification package. 3A variants with nitrile or EPDM elastomers and port options - tri-clamp, IDF, 3A, DIN11851

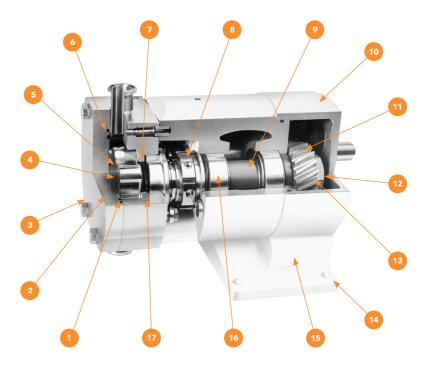
### **OTHER OPTIONS**

Aseptic barrier end cover joints to maintain sterility of product during long cycle times. Electro-polish or high-polish internal surfaces to 0.5µm Ra (20 micro-inc Ra) for minimized cell damage and maximized clean-ability.

## **MODELS**

MODEL#	DISPLACEMENT	MAX FLOW RATE	PORTS	DIMENSIONS	WEIGHT
55210	0.26 GPR (1 LPR)	4.2 GPM (16 LPM)	1/2" (13mm)	5-1/4" high x 7-1/2" long x 4-1/2" wide (135mm x 191mm x 114mm)	18lb (8kg)
55320	0.77 GPR (2.9 LPR)	11.6 GPM (44 LPM)	3/4" (19mm)	6-1/2" high x 10-1/2" long x 5-3/4" wide (168mm x 264mm x 145mm)	42lb (19kg)
55420	1.77 GPR (6.7 LPR)	17.7 GPM (67 LPM)	1" (25mm)	7-1/2" high x 11-3/4" long x 6.5" wide (191mm x 302mm x 168mm)	57lb (26kg)

### **CONSTRUCTION DETAILS**



- 1. Specially modified rotor bores link all areas to port bore to ensure full draining of product
- 2. Low carbon, stainless steel grade 316L, only 0.03% maximum carbon content, 60% less than conventional pumps
- 3. High-surface finish fully meets US #A requirements with 240 grit polish and electro-polish options
- 4. Single key rotor drive is proven to be superior to involute spline. Used in conjunction with high-tech polymer support spigot to eliminate fretting
- 5 Unique rotor design with improved profile and extended screwed stub shaft to eliminate crevices
- 6. Gasket-type joints all pump head components have been specially developed to totally eliminate the crevices associated with traditional O-rings

- 7. Ultra clean seals have been specially developed to be crevice-free, self-draining and front-loading
- 8. External rotor retainers eliminate all internal crevices associated with conventional bolts and nuts
- 9. High strength shafts made from a stainless steel with 230% greater tensile strength than conventional pump shafts
- 10. Smooth contoured externals with generous drain angle of not less than 2-1/2° and no major crevices
- 11. Extra wide helical greats up to 8-% wider than normally used. Precision ground to ensure minimal backlash and smooth operation.
- 12. Single key great drive gives precise positioning of gear and will not slip as some torque brushes can

- 13. Oil lubricated gears gives optimum lubricant film between meshing gear teeth
- 14. Multi-position mounting of foot/gear housing with only 4 screws to allow easy change from vertical to horizontal port position
- 15. Robust bearing carrier manufactured in caustic and solvent resistant, epoxy-coated cast iron
- 16. Oversize bearings up to 60% greater life than normally achieved. No maintenance required and no contamination from gear lubricant
- 17. US FDA approved materials in contact with the product throughout

## 06 Rotary Lobe Pumps

HYGIENIC



## **HP & UL Series**



**MODELS** 

34

**MAX SPEED** 

1500 RPM

1500 RPM

600 RPM

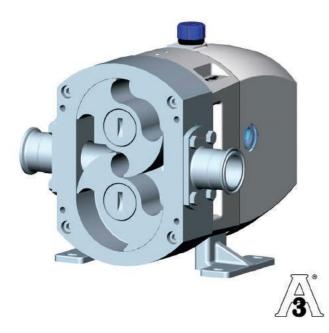
217 psi (15 bar)

116 psi

(8 bar)







With a proven 50 year heritage in Lobe Pump manufacturing, Jabsco branded lobe pumps are taking the next step in flexibility and value with the Hy-Line+ (HP Series) and Ultra-Line (UL Series).

Combined strengths and experience in one key platform. Jabsco lobe pumps offer high flow, high pressure capabilities from a positive displacement non contacting rotary lobe pump package incorporating a choice of scimitar or tri-lobe rotors. With applications in industry, food, beverage and bio-pharmaceutical processing sectors, Jabsco lobe pumps can be found decanting, transferring, filling, spraying, dosing a wide range of fluids in many varied environments (including ATEX designated zones).

Modular procurement brings flexibility. Modularity is a key feature to both the Hy-Line+ and Ultra-line series. With today's market being driven by lead time, flexibility will allow our supply chain to reduce this factor. The HP and UL series lobe pumps are offered in three key modules; Vertical and horizontal foot kits, port kits and the pump module. The pumps stand on stainless steel feet, redesigned for greater stability and improved durability.

### **FEATURES**

- Epoxy-coated bearing housing and gear cover; available in stainless steel
- Pump module, feet and port kits sold separately. 1 pump, 96 possible variants, for sizes 4 - 6
- Hopper inlet option
- Nitrile, FKM and PFTE wetted elastomers to FDA, 3A and EN1935:2004; EPDM to USP Class VI
- Front loading seals and rotors as standard across the range
- HP series end cover supports relief valves and end covers
- 304 stainless steel feet as standard on sizes 4 - 7
- Tri-lobe and scimitar rotor options on one pump platform

## **APPLICATIONS**

- Industrial
- · Food and beverage
- Bio-pharmaceutical processing
- Transfer Filling
- Spraying
- Decanting

WEIGHT

22lb

(10kg)

27lb

(12kg)

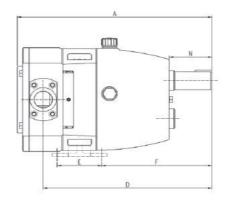
## **SPECIFICATIONS**

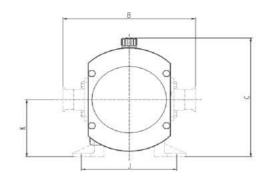
PUMP	High-flow, high-pressure, positive displacement, non-contacting rotary lobe
POWER SOURCE	Shaft coupled, electric motor drive (not provided)
WETTED PARTS	316L with epoxy-coated aluminum gear cover
SEAL*	C/SS, SiC/SiC, single or double with flush; 304 stainless steel mounting feet with nitrile, FKM, EPDM, or PFTE elastomer joints

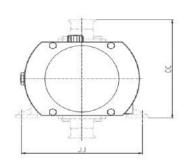
\* Additional seal information and configurations available. Please contact us if you do not see what you are looking form

## **DIMENSIONS**

Unless otherwise stated, dimensions are in inches and (mm).







PUMP SIZE	А	B*	С	СС	D	E	F	J	11	K	N
32	8.4"	7.6"	7.3"	7.6"	7.2"	1.6"	4.1"	4.3"	4.3"	3.8"	1.4"
	(213mm)	(192mm*)	(184mm)	(192mm)	(183mm)	(40mm)	(105mm)	(110mm)	(110mm)	(96mm)	(36mm)
34	9"	7.6"	7.3"	7.6"	7.4"	1.6"	4.1"	4.3"	4.3"	3.8"	1.4"
	(229mm)	(192mm)	(184mm)	(192mm)	(188mm)	(40mm)	(105mm)	(110mm)	(110mm)	(96mm)	(36mm)
42	10.8"	8.8"	8.3"	7.2"	9.1"	2.8"	5.6"	5.9"	7.9"	3.9"	1.7"
	(274mm)	(223mm)	(212mm)	(183mm)	(231mm)	(72mm)	(142mm)	(150mm)	(200mm)	(99mm)	(42mm)
44	11.4"	8.8"	8.3"	7.2"	9.5"	2.8"	5.6"	5.9"	7.9"	3.9"	1.7"
	(290mm)	(223mm)	(212mm)	(183mm)	(241mm)	(72mm)	(142mm)	(150mm)	(200mm)	(99mm)	(42mm)
52	14.5"	9.8"	9.8"	8.2"	12.6"	3.3"	8.2"	7"	9"	4.7"	3.1"
	(368mm)	(249mm)	(250mm)	(208mm)	(319mm)	(84mm)	(208mm)	(178mm)	(229mm)	(120mm)	(79mm)
54	15.6"	10.2"	9.8"	8.4"	13.3"	3.3"	8.2"	7"	9"	4.7"	3.1"
	(396mm)	(259mm)	(250mm)	(213mm)	(338mm)	(84mm)	(208mm)	(178mm)	(229mm)	(120mm)	(79mm)
62	17"	11.3"	13"	9.8"	14.6"	4.8"	8.8"	7.9"	11.6"	6.9"	3.1"
	(433mm)	(288mm)	(329mm)	(249mm)	(370mm)	(122mm)	(224mm)	(200mm)	(294mm)	(174mm)	(79mm)
64	18.2"	11.9"	13"	10.1"	14.9"	4.8"	8.2"	7.9"	11.6"	6.9"	3.1"
	(462mm)	(302mm)	(329mm)	(256mm)	(379mm)	(122mm)	(208mm)	(200mm)	(294mm)	(174mm)	(79mm)
72	19.3"	15"	15"	12.8"	16.3"	8.3"	7"	11.3"	13.5"	7.3"	3.5"
	(489mm)	(380mm)	(381mm)	(324mm)	(414mm)	(210mm)	(178mm)	(288mm)	(342mm)	(186mm)	(89mm)
74	20.8"	15"	15"	12.8"	17.3"	8.3"	7"	11.3"	13.5"	7.3"	3.5"
	(529mm)	(380mm)	(381mm)	(324mm)	(439mm)	(210mm)	(178mm)	(288mm)	(342mm)	(186mm)	(89mm)
76	22.7"	16.2"	15"	13.4"	18"	8.3"	7"	11.3"	13.5"	7.3"	3.5"
	(576mm)	(411mm)	(381mm)	(340mm)	(456mm)	(210mm)	(178mm)	(288mm)	(342mm)	(186mm)	(89mm)

- \* Size 3 has welded ports.
- 1" (25mm) tri-clamp = 6.9" (175mm)
- 1" (25mm) DIN11851 = 7.9" (201mm) 1-1/2" (38mm) BSP = 7.9" (201mm)

#### 40lb 217 psi 1000 RPM 325 GPM (1,230 LPM) (15 bar) (18kg) 44lb 116 psi 44 1000 RPM 539 GPM (2,040 LPM) (20kg) (8 bar) 70lb 1000 RPM 700 GPM (2,650 LPM) 52 (15 bar) (32kg) 116 psi 77lb 54 1000 RPM 1,202 GPM (4,550 LPM) (8 bar) (35kg) 217 psi 134lb 720 RPM 1,690 GPM (6,400 LPM) 62 (15 bar) (61kg) 143lb 116 psi 720 RPM 2,509 GPM (9,500 LPM) 64 (8 bar) (65kg) 217 psi 680 RPM 3,249 GPM (12,300 LPM) (15 bar) (125kg) 116 psi 319lb 5,415 GPM (20,500 LPM) 600 RPM (145kg) (8 bar)

**MAX FLOW** 

93 GPM (350 LPM)

211 GPM (800 LPM)

7,951 GPM (30,100 LPM)



# 07 Oscillating Pumps



OSCILLATING

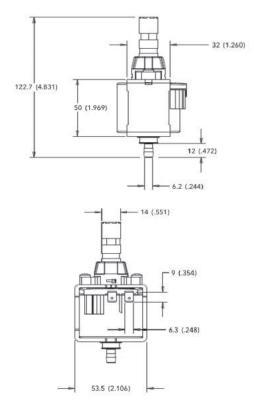
## PS Series





## **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).



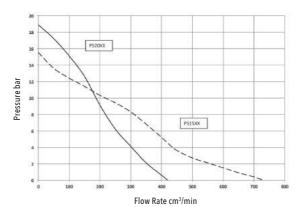
## FOR COMMERCIAL AND INDUSTRIAL MARKETS

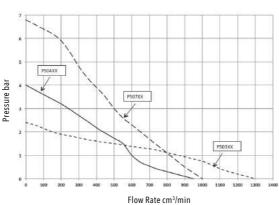
Building on our extensive experience in positive displacement pumps, Flojet's PS Series oscillating pumps provide a compact solution for low-flow, high-pressure applications.

## **APPLICATIONS**

- Espresso coffee makers
- Medical appliances
- Floor care machines
- Water dispensers
- Steam irons
- Air conditioners
- Steam generators
- Cooling systems
- Steam-cleaning systems

## PERFORMANCE





Open flow rate may vary +/- 10 percent depending on installation.

## **SPECIFICATIONS**

PUMP DESIGN	Oscillating pump
VOLTAGE	Nominal at 110V or 230V AC
MAX FLOW RATE	0.3 GPM (1.2 LPM)
MAX PRESSURE	276 psi (19 bar)
PORTS	Outlet - 1/8" (3mm) BSP (NPT optional) Inlet - 1/4" (6mm) hose barb (BSP and NPT optional)
COIL	Insulation class II/thermal class "F"
BODY	Polyamide (brass optional)
MAX LIQUID TEMPERATURE	95°F (35°C)
SEAL	NBR/HNBR
CERTIFICATIONS	CE, UL, VDE

## **MODELS**

MODEL#	MAX FLOW RATE	MAX PRESSURE	VOLTAGE	FREQUENCY	PORT / ELASTOMER MATERIAL
PS0311	0.3 GPM (1.2 LPM)	44 psi (3 bar)	120V AC	60Hz	NBR
PS0321	0.3 GPM (1.2 LPM)	44 psi (3 bar)	230V AC	50Hz	NBR
PS0411	0.25 GPM (0.95 LPM)	58 psi (4 bar)	120V AC	60Hz	NBR
PS0421	0.25 GPM (0.95 LPM)	58 psi (4 bar)	230V AC	50Hz	NBR
PS0711	0.26 GPM (0.98 LPM)	102 psi (7 bar)	120V AC	60Hz	NBR
PS0721	0.26 GPM (0.98 LPM)	102 psi (7 bar)	230V AC	50Hz	NBR
PS1511	0.17 GPM (0.64 LPM)	218 psi (15 bar)	120V AC	60Hz	NBR
PS1521	0.17 GPM (0.64 LPM)	218 psi (15 bar)	230V AC	50Hz	NBR
PS2011	0.11 GPM (0.42 LPM)	276 psi (19 bar)	120V AC	60Hz	NBR
PS2021	0.11 GPM (0.42 LPM)	276 psi (19 bar)	230V AC	50Hz	NBR

## **ACCESSORIES**

PART#	DESCRIPTION
PSA0100	Inlet elbow hose adapter
PSA0101	Inlet adapter - 1/8" (3mm)
PSA0200	Rubber pump mount - PVC - < 122°F (50°C)
PSA0201	Rubber pump mount - SEBS - < 212°F (100°C)



## 08 Sliding Vane Pumps

DIESEL SLIDING VANE



## **Rotary Vane Pump**











### **FOR INTERNATIONAL & US MARKETS**

The Jabsco reversible rotary vane pump is ideal for transferring diesel fuel. It is self-priming to about 3' (0.9m) and can pump against a discharge head up to 20' (6m). With its integral on/off reversing switch, it is ideal for moving fuel between port and starboard fuel tanks. Meets USCG 183.410 and ISO8846 MARINE (Ignition Protection).

## **MODELS**

MODEL#	CE	DESCRIPTION
18680-0920	Yes	6.1 GPM (23 LPM) 12V DC pump 1/2" (13mm) NPT
18680-0940	Yes	6.1 GPM (23 LPM) 24V DC pump 1/2" (13mm) NPT
18680-1000	Yes	6.1 GPM (23 LPM) 12V DC pump 1/2" (13mm) NPT reversible

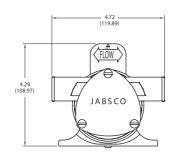
Note: 18680-1000 is reversible, the other models are not.

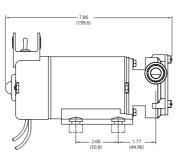
## **SPECIFICATIONS**

PORTS	1/2" (13mm) NPT internal pipe threads 1" (25mm) external hose barb
MOTOR	12V DC permanent magnet type, intermittent duty, fully enclosed
BODY	Bronze
SHAFT	Stainless steel
SEAL	Nitrile lip type
ROTOR	Vectra
VANES	Ryton
DIMENSIONS	3-3/8" high x 8-5/8" long x 4-3/4" wide (86mm x 219mm x 121mm)
WEIGHT	5.5lb (2.5kg)

## **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).





## Sliding Vane VF040

## Light-duty diesel pump.

- 10 GPM (38 LPM) at 10' (3m) head
- 22' (7m) maximum total head
- Self-priming up to 9' (2.8m) vertical lift
- 22°F (-30°C) to 104°F (40°C) operating temperature range
- 30 minutes at 10' (3m) at 86°F (30°C)
- IP55 and thermally protected motor
- Integral switch fitted as standard
- Accessories available
- ISO 8846 MARINE (Ignition Protection)

## **MODELS**

MODEL	DESCRIPTION
VF040-012-6120A	12V DC model, fitted switch
VF040-024-6120A	24V DC model, fitted switch
SK422-0025	Service Kit

155

## **SPECIFICATIONS**

FITTING	Connections for 3/4" (19mm) ID hose
SIZE	8" long x 5" wide x 6-1/4" high (20cm x 13cm x 16cm)
WEIGHT	4.4lb (2kg)

## Sliding Vane VF060

## Continuously rated, diesel pump

- 20 GPM (68 LPM) at 10' (3m) total head
- Self-priming up to 9.6' (3m) vertical lift
- Integral switch and ports as standard
- 22°F (-30°C) to 104°F (40°C) operating temperature range
- IP55 and thermally protected motor
- ISO 8846 MARINE (Ignition Protection)



### **MODELS**

MODEL	DESCRIPTION
VF060-024-6120A	24V DC model, fitted switch, 1" (25mm) ID hose
SK422-0035	Service Kit

## **SPECIFICATIONS**

FITTING	Connections for 1" (25mm) ID hose
SIZE	8" long x 5" wide x 6-1/4" high ( $20 \text{cm} \times 13 \text{cm} \times 16 \text{cm}$ )
WEIGHT	11lb (5kg)

## Sliding Vane VF100

## Heavy-duty, continuously rated diesel pump.

- 29 GPM (110 LPM) at 10' (3m) total head
- Self-priming up to 16' (5m) vertical lift
- 22°F (-30°C) to 104°F (40°C) operating temperature range
- IP55 and thermally protected motor
- ISO 8846 MARINE (Ignition Protection)



## **MODELS**

MODEL	DESCRIPTION
VF100-024-6120A	24V DC model, fitted switch, 1-1/4" (32mm) ID hose
SK422-0045	Service Kit

## **SPECIFICATIONS**

FITTING	Connections for 1-1/4" (32mm) ID hose
SIZE	10" long x 5-1/2" wide x 6-3/4" high (25cm x 14cm x 17cm)
WEIGHT	19.8lb (9kg)



# 09 Specialty Products

RI OWERS



## Flange Mount Blower







### **FOR INTERNATIONAL & US MARKETS**

Flange mount blowers are mounted with the discharge port fastened directly to a flat surface to minimize ducting. The inlet port can then be connected with duct hose to the area requiring ventilation. Standard models are rated for intermittent service, 15 minutes on and 15 minutes off. Commercial-duty models are rated for continuous service.

## **FEATURES**

- · Tough, reinforced plastic housing
- Mount to any flat surface
- Slip-on inlet ducting connection
- Efficient, high volume air flow
- Low current draw
- Corrosion-resistant materials throughout
- N.M.M.A. type accepted
- Meets USCG Electrical Regulations of Title 33,, chapter I, part 183; subpart I and ISO 8846 MARINE for ignition protection
- DC models comply with ISO 9097

## MODELS

MODEL#	CE	AIR FLOW	VOLTAGE	AMPS	FUSE SIZE	INLET	OUTLET	DIMENSIONS	WEIGHT
	STANDARD DUTY								
34744-0000	Yes	100 CFM 47,200 CUCM/sec	115V AC	0.7A	0.8A	3" (76mm)	2-3/4" (70mm)	7-5/8" high x 6-5/8" wide x 7" long (193mm x 168mm x 175mm)	5lb (2.3kg)
35115-0020	Yes	105 CFM 49,600 CUCM/sec	12V DC	4.4A	6A	3" (76mm)	2-3/4" (70mm)	5-1/2" high x 4-3/4 wide x 6-3/4" long (140mm x 121mm x 171mm)	4lb (1.8kg)
34739-0010	Yes	150 CFM 70,800 CUCM/sec	12V DC	6.5A	10A	3" (76mm)	2-3/4" (70mm)	7-5/8" high x 6-5/8" wide x 8" long (193mm x 168mm x 203mm)	5lb (2.3kg)
34739-0020	Yes	150 CFM 70,800 CUCM/sec	24V DC	3.3A	5A	3" (76mm)	2-3/4" (70mm)	7-5/8" high x 6-5/8" wide x 8" long (193mm x 168mm x 203mm)	5lb (2.3kg)
34739-0031	Yes	140 CFM 66,000 CUCM/sec	115V AC	1A	1.3A	3" (76mm)	2-3/4" (70mm)	7-5/8" high x 6-5/8" wide x 8-3/8" long (193mm x 168mm x 213mm)	5lb (2.3kg)
35400-0000	Yes	250 CFM 118,000 CUCM/sec	12V DC	10A	15A	4" (102mm)	3-5/8" (91mm)	9" high x 8-3/4" wide x 8-3/4" long (229mm x 222mm x 222mm)	6lb (2.7kg)
35400-0010	Yes	250 CFM 118,000 CUCM/sec	24V DC	5.3A	7.5A	4" (102mm)	3-5/8" (91mm)	9" high x 8-3/4" wide x 8-3/4" long (229mm x 222mm x 222mm)	6lb (2.7kg)
					СОМ	MERCIAL DUTY			
35760-0092	Yes	250 CFM 118,000 CUCM/sec	12V DC	11A	15A	4" (102mm)	3-5/8" (91mm)	9" high x 9-7/8" wide x 8-3/4" long (229mm x 230mm x 222mm)	6lb (2.7kg)
35760-0094	Yes	250 CFM 118,000 CUCM/sec	24V DC	6A	10A	4" (102mm)	3-5/8" (91mm)	9" high x 9-7/8" wide x 8-3/4" long (229mm x 230mm x 222mm)	6lb (2.7kg)
36760-0115	Yes	250 CFM 118,000 CUCM/sec	115V AC	1.5A	3A	4" (102mm)	3-5/8" (91mm)	9" high x 9-7/8" wide x 8-3/4" long (229mm x 230mm x 222mm)	9lb (4.1kg)

## Flex Mount Blower







### **FOR INTERNATIONAL & US MARKETS**

Flex mount blowers have both inlet and outlet ports designed for slip-on flexible duct connections. They are ideal when an in-line installation is preferred. The blower may be rotated in the mounting bracket to orient the discharge port in any direction. Standard-duty blowers are rated for intermittent service, 15 minutes on and 15 minutes off. Commercial-duty models are rated for continuous service.

### **FEATURES**

- Tough, reinforced plastic housing
- Universal flexmount bracket permits outlet to face any direction
- Slip-on inlet ducting connection
- Efficient, high volume air flow
- Low current draw
- Corrosion-resistant materials throughout
- N.M.M.A. type accepted
- Meets USCG Electrical Regulations of Title 33,, chapter I, part 183; subpart I and ISO 8846 MARINE for ignition protection
- DC models comply with ISO 9097 MARINE

## MODELS

MODEL#	CE	AIR FLOW	VOLTAGE	AMPS	FUSE SIZE	INLET	OUTLET	DIMENSIONS	WEIGHT
STANDARD DUTY									
34754-0000	Yes	100 CFM 47,200 CUCM/sec	115V AC	0.7A	0.8A	3" (76mm)	2-3/4" (70mm)	7-5/8" high x 6-5/8" wide x 7" long (193mm x 168mm x 175mm)	5lb (2.3kg)
35115-0010	Yes	105 CFM 49,600 CUCM/sec	12V DC	4.3A	6A	3" (76mm)	2-3/4" (70mm)	5-1/2" high x 4-3/4 wide x 6-3/4" long (140mm x 121mm x 171mm)	4lb (1.8kg)
36740-0010	Yes	150 CFM 70,800 CUCM/sec	12V DC	6.8A	10A	3" (76mm)	2-3/4" (70mm)	7-5/8" high x 6-5/8" wide x 8" long (193mm x 168mm x 203mm)	5lb (2.3kg)
36740-0020	Yes	150 CFM 70,800 CUCM/sec	24V DC	3.3A	5A	3" (76mm)	2-3/4" (70mm)	7-5/8" high x 6-5/8" wide x 8" long (193mm x 168mm x 203mm)	5lb (2.3kg)
36740-0031	Yes	140 CFM 66,000 CUCM/sec	115V AC	1A	1.3A	3" (76mm)	2-3/4" (70mm)	7-5/8" high x 6-5/8" wide x 8-3/8" long (193mm x 168mm x 213mm)	5lb (2.3kg)
35400-0000	Yes	250 CFM 118,000 CUCM/sec	12V DC	10A	15A	4" (102mm)	3-5/8" (91mm)	9" high x 8-3/4" wide x 8-3/4" long (229mm x 222mm x 222mm)	6lb (2.7kg)
35400-0010	Yes	250 CFM 118,000 CUCM/sec	24V DC	5.3A	7.5A	4" (102mm)	3-5/8" (91mm)	9" high x 8-3/4" wide x 8-3/4" long (229mm x 222mm x 222mm)	6lb (2.7kg)
					СОМІ	MERCIAL DUTY			
35770-0092	Yes	250 CFM 118,000 CUCM/sec	12V DC	11A	15A	4" (102mm)	3-5/8" (91mm)	9" high x 9-7/8" wide x 8-3/4" long (229mm x 230mm x 222mm)	6lb (2.7kg)
35770-0094	Yes	250 CFM 118,000 CUCM/sec	24V DC	6A	10A	4" (102mm)	3-5/8" (91mm)	9" high x 9-7/8" wide x 8-3/4" long (229mm x 230mm x 222mm)	6lb (2.7kg)
36770-0115	Yes	250 CFM 118,000 CUCM/sec	115V AC	1.5A	3A	4" (102mm)	3-5/8" (91mm)	9" high x 9-7/8" wide x 8-3/4" long (229mm x 230mm x 222mm)	9lb (4.1kg)

Specialty Products 09

# 09 Specialty Products











#### **FOR INTERNATIONAL & US MARKETS**

Designed for efficient, high-output operation, these blowers feature corrosionresistant motor housings for long life. Compact and easily installed on any flat surface, Rule® in-line blowers provide higher air flow, lower amp draw, and quieter operation than standard blowers.

These blowers can be run at half voltage (for example, 24V version at 12V) to reduce noise, reduce flow, and greatly extend motor life.

#### **FEATURES**

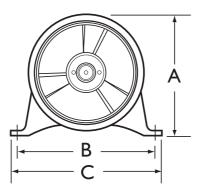
- · Efficient high volume air flow
- Quiet operation with a low amp draw
- Slip-on inlet and outlet ducting connections
- · Corrosion-resistant, nickel-plated motor housing
- IMCI (CE)
- · Ignition protected

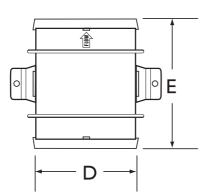
#### **MODELS**

MODEL#	CE	DUCTING	VOLTAGE	CFM AT OPEN FLOW	AMP DRAW	FUSE SIZE
140	Yes	3"(76mm)	13.6V	135	2.9A	4A
140-24V	Yes	3"(76mm)	27.2V	135	1.7A	2.5A
240	Yes	4" (102mm)	13.6V	235	4.3A	7A
240-24V	Yes	4" (102mm)	27.2V	235	2.4A	4A

### **DIMENSIONAL DRAWINGS**

Unless otherwise stated, dimensions are in inches and (mm).





240 & 240-24v

E 5-1/4" (133mm)

140 & 140-24v A 3-3/16" (81mm) B 4-1/12"(114mm) C 5" (127mm) D 3" (76mm)

- A 4-3/16" (106mm) B 5-1/12" (140mm)
- C 6" (152mm)
- D 4" (102mm)
- E 5-1/4" (133mm)



## Specialty Products 09

**BOTTLED WATER SYSTEMS** 

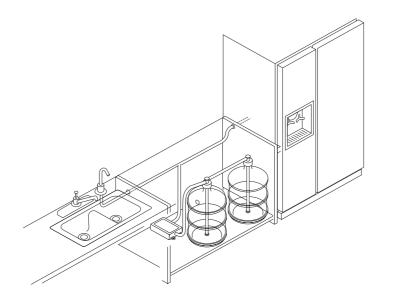
## Bottled Water Solutions for Beverage Dispensing

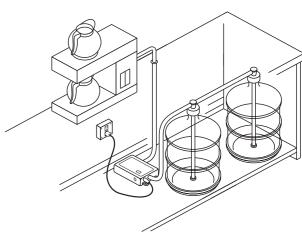
There are many situations where portable water is needed for a variety of drink dispensers, in locations where filtered water is not available. A good example is a portable coffee station. These are often moved into ideal locations for conferences, meetings or other specific events, but those convenient locations often don't have plumbing for water. Even businesses that want a permanent installation may not want to incur the cost of installing plumbing to the desired location.

A common solution in these situations is to use purified bottled water as the water source for the drink dispenser with a pump to provide pressure. Using purified bottled water has the advantage that no plumbed water is required, and the pump provides constant pressure for beverage dispensers. The pump also eliminates the need to lift the 40+ pound water bottle up high and flip it into a typical water dispenser.

Flojet offers bottled water systems with options to work with 1 or 2 jugs of bottled water at a time. Single inlet models feature one suction wand while the dual inlet modes feature two. Dual inlet models are ideal in high water use situations.

All Flojet bottled water systems shut off automatically when the water source is depleted. When water is restored, the pump automatically restarts. A sealed vacuum keeps water fresh and a built-in check valve prevents back flow. The pump operates quietly and automatically turns on and off when the faucet is opened and closed. Systems are available in 115F and 230V options.





Bottled water products shown on page 162-163.

# 09 Specialty Products

BOTTLED WATER SYSTEMS



## 5000 Series Bottle Water System











### **FEATURES**

- Float switch for automatic shut-off when bottle is empty
- Built-in check valve to prevent back flow
- Universal seal cap
- Easy mounting and installation
- Upgrade kits available
- 20' (6.1m) 1/4" (6mm) OD discharge hose included

### **APPLICATIONS**

- Designed for dispensing bottled water to coffee machines, beverage dispensers, vending machines and carts
- For remote locations where water supply is inaccessible

## **SINGLE INLET BOTTLE WATER SYSTEM MODELS**

MODEL#	VOLTAGE	PLUG
BW5000-000A	115V AC	US plug
BW5002-000A	230V AC	AU plug
BW5003-000A	115V AC	UK plug
BW5004-000A	230V AV	EU plug

## **DUAL INLET BOTTLE WATER SYSTEM MODELS**

MODEL#	VOLTAGE	PLUG
BW5020-000A	115V AC	US plug
BW5022-000A	230V AC	AU plug
BW5023-000A	115V AC	UK plug
BW5024-0004	230V AC	EU plug

## BevJet Compact & BevJet5000









### **BEVJET COMPACT**

- BevJet Compact is designed for use with bottled water application and has a bag-in-box dispense system for dispensing wine, juice, teas or liquor
- Senses when bottle/beverage box is empty and automatically shuts down
- Illuminated ON/OFF switch indicated when supply is depleted
- Compact design allows it to be mounted in tight spaces such as cabinets, carts and under counter applications

#### BEVJET5000

- Bag-in-box dispense system is designed for dispensing wine, juice, teas or liquor
- Senses when beverage box is empty and automatically shuts down; restarts automatically when full supply is reconnected
- Enclosed pump unit is easy to clean, prevents contamination and minimizes noise

Both the BevJet Compact and BevJet5000 are NSF certified and have quick disconnect ports that allow for hose replacement within seconds.

## **BEVJET COMPACT MODELS**

MODEL#	VOLTAGE	PLUG	COMMENTS
BLC1011-000A	115V AC	US plug	
BLC2011-000A	230V AC	UK plug	
BLC3011-000A	230V AC	EU plug	
BLC4011-000A	230V AC	AU plug	
BLC5011-000A	100V-240V AC	No plug	
BLC1011-010A*	115V AC	US plug	
BLC2011-010A*	230V AC	UK plug	
BLC3011-010A*	230V AC	EU plug	
BLC4011-010A*	230V AC	AU plug	
BLC5011-010A*	100V-240V AC	No plug	
BLC1011-011A*	115V AC	US plug	Includes faucet
BLC2011-011A*	230V AC	UK plug	Includes faucet
BLC3011-011A*	230V AC	EU plug	Includes faucet
BLC4011-011A*	230V AC	AU plug	Includes faucet
BLC5011-011A*	100V-240V AC	No plug	Includes faucet

<sup>\*</sup> Includes cap for 5 gallon water bottle and 20' (6.1m) of 1/4" (6mm) tubing

## **BEVJET 5000 MODELS**

MODEL#	VOLTAGE	PLUG
BIB5000A	100V-240V AC, 50/60 Hz, 1.5A	US plug
BIB5002A	100V-240V AC, 50/60 Hz, 1.5A	AU plug
BIB5003A	100V-240V AC, 50/60 Hz, 1.5A	UK plug
BIB5004A	100V-240V AC, 50/60 Hz, 1.5A	EU plug
BIB5005A	12V DC, 1.2A	No plug

# 09 Specialty Products

OIL CHANGERS



## Porta-Quick









### **FOR INTERNATIONAL & US MARKETS**

The Porta-Quick™ portable oil changer makes quick, clean, and easy on-site oil changes using the vehicle's battery to power a reversible flexible impeller pump.

### **FEATURES**

- 14 quart (13L) container easily handles two engines
- Pump is reversible to both drain and refill engine oil
- · Corrosion-resistant bronze pump head
- High-temperature-resistant Teflon™ dipstick probe
- Non-collapsible, thick-wall suction hose
- Garden hose thread adapter included for dipsticks with GHT male threaded ends
- Ignition protected means it will not spark in the presence of fuel vapors

## **MODELS**

MODEL#	CE	VOLTAGE	AMP DRAW	FUSE SIZE
17800-2000	Yes	12V DC	7A	10A
17800-2024	Yes	24V DC	3.5A	5A

## **SPECIFICATIONS**

VOLTAGE	12V or 24V DC		
MOTOR	Reversible with integral reversing switch		
BODY	Bronze		
SEAL	Lip type		
IMPELLER	Nitrile		
CONTAINER	Plastic with 14 quart (13.25 liter) capacity		
POWER CORD	6' (2m) with alligator clips		
SUCTION HOSE	4' (1.2m) of neoprene hose with 40" (1.2m) teflon dipstick probe		
DIMENSIONS	15" high x 12-3/8"diameter (381mm x 314mm)		
WEIGHT	9lb (4.1kg)		

## Permanent Oil Changer







### **FOR INTERNATIONAL & US MARKETS**

The Jabsco Oil Change system's manifold is factory-fitted with three ball valves to serve three different oil reservoirs, and may be fitted with two additional ball valves to drain up to five. The system can remove old oil from an engine or transmission, then be reversed with the built-in switch to pump new oil back into the engine or transmission. The system's cover provides an attractive appearance, fully shrouding the entire pump and manifold system. It also provides added protection against accidental draining of an engine's oil supply as it protects the valves from being accidentally left open. Additionally, at the end of an oil change, the cover will not close unless the valves are in the fully closed position.

## **MODELS**

MODEL#	CE	VOLTAGE	AMP DRAW	FUSE SIZE
17820-0012	Yes	12V DC	10A	15A
17820-0024	Yes	24V DC	5A	8A

## **SPECIFICATIONS**

VOLTAGE  12V or 24V DC  Reversible permanent magnet with integral reversing switch; complies with USCG 183.410 and ISO 8846 MARINE  BODY  Bronze  SEAL  Nitrile lip type  IMPELLER  Nitrile  6' (2m) with alligator clips
MOTOR reversing switch; complies with USCG 183.410 and ISO 8846 MARINE  BODY Bronze  SEAL Nitrile lip type  IMPELLER Nitrile
SEAL Nitrile lip type  IMPELLER Nitrile
IMPELLER Nitrile
<b>POWER CORD</b> 6' (2m) with alligator clips
VALVES 1/2" (13mm) NPT full flow ball type
6-1/4" high x 10.9" long x 10.2" wide (159mm x 276mm x 259mm)
WEIGHT 9lb (4.1kg)

# 09 Specialty Products

OIL CHANGERS



## Do-it-Yourself Oil Changer







### **FOR INTERNATIONAL & US MARKETS**

The Do-It-Yourself Oil Changer is simple to use, and offers quick and easy operation for light-duty oil changes.

### **FEATURES**

- · Great for lawn mowers, compactors, and other small-engine oil changes
- Fully assembled
- 14 quart (13L) container
- Tested to 1400 cycles
- 8' (2.5m) high temperature-resistant Teflon™ dipstick probe
- Uses the 12V power from your car or truck to operate a quiet diaphragm pump

### **MODELS**

MODEL#	CE	VOLTAGE	AMP DRAW	FUSE SIZE
17850-1012	Yes	12V DC	2A	5A

### **SPECIFICATIONS**

MOTOR	12V DC with integral power switch
BODY	Polypropylene
DIAPHRAGM	Buna/PP blend, oil resistant
VALVES	FKM, oil resistant
CONTAINER	Plastic with 3.5 gallon (13.2 liter) capacity bucket
BATTERY LEADS	6' (2m) with alligator clips
SUCTION HOSE	8' (2.5m) oil and heat resistant
DIMENSIONS	16" high x 12-3/8"diameter (406mm x 314mm)
WEIGHT	Empty - 6lb (2.7kg)

## Flat Tank Oil Changer







### **FOR INTERNATIONAL & US MARKETS**

The Jabsco Flat Tank Oil Changer system simplifies the engine oil changing process. Ideal for changing engine oil in boats, RVs, and lawn and garden equipment. There is no need to worry about open containers causing spills when changing engine oils with the 3-1/2 gallon (13L) compact, self-contained unit, fitted with a self-priming diaphragm pump with an easy-pour spout for emptying. The flat tank design allows for easy storage in work boxes, sheds or in the garage. Easy to use, clean and efficient dipstick suction tube, battery clamp wire leads and on/off pump switch.

## **FEATURES**

- Stores easily
- Compact, robust tank design
- Easy-pour spout with screw-on cap
- Easy-to-carry handle
- 3-1/2 gallon (13L) sealed container
- Self-priming,run-dry pump
- Battery leads: 6' (2m) with alligator clips for easy connection to 12V car or truck battery
- Suction tube: 8' (2.4m), oil and heat-
- Powerful 12V DC motor makes oil changing quick and simple

## **MODELS**

MODEL#	CE	VOLTAGE	AMP DRAW	FUSE SIZE
17860-0012	Yes	12V DC	4A	5A

## **SPECIFICATIONS**

MOTOR	Includes integral power switch
VOLTAGE	12V or 24V DC
BODY	Polypropylene
DIAPHRAGM	Buna/PP blend
VALVES	FKM
CONTAINER	Plastic with 14 quart (13.24 liter) capacity tank
BATTERY LEADS	7' (2.1m) with alligator clips
SUCTION HOSE	8' (2.4m) oil and heat resistant
WEIGHT	Empty - 6lb (2.7kg)



## 10 Chemical Resistance Guide

INTRODUCTION

## Introduction

This Chemical Resistance Guide is offered to assist in selecting pump materials that are most resistant to the chemicals that may be used with a Xylem pump. The information is based on Xylem laboratory tests, field testing programs, and general data from industry sources. It should be used only as a guide in the selection of pump materials. Suitability for the application should be determined by actual use and is the full responsibility of the customer. No warranty, expressed or implied, can be extended by Xylem where failure is caused by chemical attack on pump materials. Temperature, aeration, concentration, and other factors may change the effect of the specific fluid on the pump materials. Data shown is based on results at ambient temperatures, unless otherwise noted.

### **RATING SYSTEM**

The "A" rating indicates little effect on the physical properties of the material (Generally Satisfactory).

The "B" rating indicates minor to moderate effect (Generally Satisfactory but Should be Qualified By Testing).

The "C" rating indicates a change in the physical properties in excess of acceptable tolerances could occur (Generally Not Satisfactory, Must be Qualified By Testing).

The "D" rating indicates rapid physical deterioration, swelling of check valves, or diaphragm, or chemical attack on the pump housing material (Not Satisfactory).

Where no rating is shown, data is not currently available, and pump materials should be qualified by testing.

It is recommended that the pump be thoroughly flushed with water or other neutralizing agent after each use whenever possible.

ELASTOMER	PROPERTIES	GENERAL CHEMICA	L RESISTANCE
ELASIOMER	PROPERTIES	RESISTANT TO	ATTACKED BY
Buna-N	Excellent resistance to petroleum-based fluids. Good physical properties.	Many hydrocarbons, fats, oils, greases, hydraulic fluids, chemicals.	Ozone (except PVC blends), ketones, esters, aldehydes, chlorinated and nitro hydrocarbons.
EP/PP blend (Santoprene)	Resistant to a wide variety of solvents and chemicals. Excellent abrasion resistance and long mechanical flex life in hot and cold environments.	High polar fluids such as alcohols, ketones, glycols, esters, and aqueous solutions of acids, salts and bases.	Most hydrocarbons and petroleum- or oil-based products
EPDM	Excellent ozone, chemical, and aging resistance. Poor resistance to petroleum-based fluids.	Animal and vegetable oils, ozone, strong and oxidizing chemicals.	Mineral oils and solvents, aromatic hydrocarbons.
FFKM (Kalrez)	Excellent chemical resistance. Excellent high and low temperature properties.		
FKM (Viton)	Excellent oil and air resistance both at low and high temperatures. Very good chemical resistance.	All aliphatic, aromatic and halogenated hydrocarbons, acids, animal and vegetable oils.	Ketones, low molecular weight esters and nitro-containing compounds, and nitro hydrocarbons.
Fluoro-silicone	Moderate or oxidizing chemicals, ozone, aromatic chlorinated solvents, bases.	Brake fluids, hydrazine, ketones.	
Natural rubber	Excellent physical properties including abrasion and low temperature resistance. Poor resistance to petroleum-based fluids.	Most moderate chemicals, wet or dry, organic acids, alcohols, ketones, aldehydes and alkalies.	Ozone, strong acids, fats, oils, greases, most hydrocarbons including benzene, toluene, gasoline, and lubricating oils.
Neoprene	Good weathering resistance. Flame retarding. Moderate resistance to petroleum-based fluids.	Moderate chemicals and acids, ozone, oils, fats, greases, many oils and solvents.	Strong oxidizing acids, esters, ketones, chlorinated, aromatic and nitro hydrocarbons.
Silicone	Excellent high and low temperature properties. Fair physical properties.	Moderate or oxidizing chemicals, ozone, concentrated sodium hydroxide.	Many solvents, oils, concentrated acids, dilute sodium hydroxide.



## **GAS WARNING**

No pump manufactured by Xylem should be used for gasoline or any fluid with a flash point below 100°F (38°C).

CHEMICAL RESISTANCE GUIDE TABLES

	I	_					_					Alloys		
		Р	lastic	S			E	lasto	omer	s		All	oys	
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy	
Acetaldehyde	А	А	D		D	С	D	А	В	В	А	А	А	
Acetamide	А	А	Α	А	С	В	А	В	А	А	Α	А		
Acetate Solvents (crude)	D	А	А	N/A	А	D	D	С	В	В	А	А		
Acetate Solvents (pure)	D	А	В			D	D	С	В	В	А	А		
Acetic Acid, Glacial	Α	D	Α	D	Α	D	С	В	В		Α	А	А	
Acetic Acid, 10%	Α	С	Α			С	В		В		Α	А		
Acetic Acid, 20%	Α	В	Α	С	А	С	В	В	В		Α	А		
Acetic Acid, 50%	Α	D	Α			С	Α		В	А	Α	А		
Acetic Acid, 80%	В	D	Α	D	С	С	С	В	Α	В	Α	А		
Acetic Acid (pure)	Α	D	Α	D	С	D	С	В	В	В	Α	А	Α	
Acetic Anhydride	С	А	С	D	В	D	D	С	С	В	Α	А	А	
Acetone	Α	А	С	А	D	D	D	В	Α	С	Α	А		
Acetophenone	С					D	С		А	D	Α	В		
Acetyl Chloride	D	D	D	D	А	Α	D	С	D	В	Α	В		
Acetylene	Α	А	Α	А	А	Α	В	В	Α	С	Α	А		
Acetylene Tetrabromide	А		А			А	D				А	А		
Acetylesalicylic Acid	Α	А								С	Α	А		
Acrylonitrile	Α	А	Α	N/A	А	D	D	D	D	D	Α	В		
Adipic Acid				N/A	А		Α			V	Α			
Aero Lubriplate						Α	А	В		С	Α			
Aero Safe 2300						D	D	С		В	А			
Alcohol - Amyl	А	А	В	А	А	С	В	D	А	А	А			
Alcohol - Benzyl	А	D	D	А	А	А	D		В	А	А	А	А	
Alcohol - Butyl	А	А	А	А	А	А	А	В	В	А	А	А	А	
Alcohol - Diacetone	А	А	В	А	А	С	D	D	А	С	А	А	А	
Alcohol - Ethyl	А	А	В	А	N/A	В	С	В	А	В	А	А	А	
Alcohol - Hexyl		А	А	А	N/A	В	А	В		В	Α	А	А	
Alcohol - Isobutyl	А	А	А	А	N/A	А	В	А	А	А	А	А	А	
Alcohol - Isopropyl	А	В	А	А	N/A	А	В	А	А	В	А	А	А	
Alcohol - Methyl	А	А	А	А	А	С	А	А	А	А	А	А	А	
Alcohol - Octyl	А	А	Α	А	N/A	В	В	В	А	В	Α	А	А	
Alcohol - Propyl	А	В	А	А	А	А	А	А	А	А	А	А	А	
Aluminum Chloride, 20%	А	С	В	С	А	А	А	В	А		А	С	А	
Aluminum Chloride	А	D	В	N/A	А	А	А	В	А	А	А	С	В	
Aluminum Citrate											А			
Aluminum Flouride	Α	А	Α	С	А	С	А	В	Α		А	С		
Aluminum Formate						D	D				А			

		Р	lastic	cs			E	Elasto	mer	s		Alloys	
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Aluminum Hydroxide	А	А	А	А	А	В	А		А		А	А	
Aluminum Nitrate	А		А	В	А	В	А				Α		
Aluminum Oxychloride	А					D					А		
Aluminum Phosphate						А	А			А	Α		
Aluminum Potassium Sulfate, 10%	А	D	А	С	В	А	А	А	А	А	А	В	
Aluminum Potassium Sulfate	А	D	А	С	N/A	А	А	А	А	А	А	А	С
Aluminum Sulfate	А	А	А	В	А	А	А	А	А		А	В	
Amines	В	D		D	N/A	D	D	В	В	А	А		В
Ammonia, 10%	А	А	С	D	А	С	D			А	А		
Ammonia, anhydrous	А	А	Α	D	А	D	С	D	Α	Α	Α	А	
Ammonia (liquid)	Α	В		D	А	D	С		Α	А	Α	А	В
Ammonia Nitrate	А	D		С	А	D	С		Α	А	Α	А	
Ammonium Acetate				N/A	N/A	А	Α		Α	Α	Α		
Ammonium Alum							В				Α		
Ammonium Bichromate							А		А		А		
Ammonium Biflouride	А		А	D	А	А	В		А	А	А		
Ammonium Bisulfide	А										А		
Ammonium Carbonate	А	А	В	D	А	А	С	А		А	А	В	
Ammonium Casenite				D	N/A					А	А	А	В
Ammonium Chloride	А	С	А	В	А	А	В		А	А	А	С	
Ammonium Dichromate							А			А	А		В
Ammonium Flouride							В			В	А		
Ammonium Flouride, 10%	А					А	А				А		
Ammonium Flouride, 25%	А										А		
Ammonium Hydroxide	А	А	А	С	А	В	С	А	А		А	А	В
Ammonium Metaphosphate	А		А			А	А		А		А		
Ammonium Nitrate	А	В		А	А	А	А		А	А	А	А	D
Ammonium Oxalate		В	А	В	N/A		А			А	А	А	
Ammonium Persulfate	А	С	А	D	А	В	С		В	А	А	А	D
Ammonium Phosphate, Dibasic	А	С		В	А	А	А	А	А	А	А	С	

		P	lastic	CS			E	lasto	omer	S		Alloys		
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy	
Ammonium Phosphate, Monobasic	А	В	А	В	N/A	А	А	А	А		А	С		
Ammonium Phosphate, Tribasic	А	В	А	В	N/A	А	А	А	А		А	В		
Ammonium Sulfate	А	А	А	В	А	Α	Α	А	Α	С	Α	В	В	
Ammonium Thiosulfate			А	В	N/A		А			А	А	А		
Amyl Actate	С	А	А	В	А	D	D	D	А	D	Α	А	Α	
Amyl Alcohol	В	А	В	А	А	В	В	D	Α	Α	Α	Α		
Amyl Chloride	D	С	D	А	А	В	D	D		С	Α		Α	
Anniline	С	С	В	А	А	D	D	D	В	А	Α	В	В	
Anti-Freeze	D	D		D	N/A	Α	А			Α	Α	Α		
Aqua Regia	В	D	С	D	А	В	D	D		D	Α	D	D	
Arochlor	D	А	В	N/A	N/A	А	С	В	В	D	Α	В	Α	
Aromatic Hydrocarbons	D		D	А	N/A	А	С	D	D	С	А	В		
Arsenic Acid	А		В	D	А	А	А	А	Α	Α	А	В	В	
Asphalt	В	А	С	В	А	А	В	D	D	В	Α	А		
Barium Carbonate	А	А	В	А	А	А	А		Α	А	Α	В	В	
Barium Chloride	А	А	А	А	А	А	А	А	А	А	А	В	Α	
Barium Cyanide	D		В	В	N/A	Α	С		Α	А	Α	В		
Barium Hydroxide	В	А	В	D	А	Α	В	Α	Α	А	Α	В	В	
Barium Nitrate	А	Α	В	В	N/A	А	Α		Α	А	Α	В	В	
Barium Sulfate	А	Α	А	В	А	А	Α	А	Α	А	Α	А	С	
Barium Sulfide	В	А	А	А	А	Α	А	А	Α	А	Α			
Beer	А	А	А	А	А	А	А	А	Α		Α	А	Α	
Beer Surgar Liquid	В	А		В	А	А	А	А	А		А	А		
Benzaldehyde	С	С	D	А	А	D	D	D	С	D	Α	А	Α	
Benzalkonium Chloride											С	А		
Bezene	С	А	D	А	А	А	D	D	D	С	Α	В	В	
Benzoic Acid	В	С	С	В	А	А	D	В	С	А	А	В	В	
Benzol	А	D	С	А	А	А	D		В	С	А	А		
Benzyl Benzonite						Α	D		С	С	Α			
Benzyl Chloride				А	N/A	D	D	D	D	С	Α			
Black Liquor	Α	А				А	А	В	В	С	Α			
Bleach	Α	С	Α	N/A	N/A	А	D	В	Α	В	Α			
Borax	Α	А	Α	В	Α	А	С	В	Α	А	Α	А	Α	
Boric Acid	Α	В	Α	А	А	А	Α	А	Α	А	Α	В	Α	
Brake Fluid				В	N/A	D	С	С	Α	А	Α			
Brewery Slop						Α	А				Α	А		
Brine	А					А	Α				Α			

	Plastics							Elast	omei	rs		Alloys		
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy	
Brine Acid	А		Α			А	Α		А		А			
Bromine (dry)		D		D	А	Α	D	D	D	С	А		Α	
Bromine (gas)		D				Α	D	D	D		А		Α	
Bromine (liquid)	D	D	D			А	D	D	D	С	А	D	А	
Bromine Water	С	D	D			Α	С	D	D	В	А		Α	
Bromobenzene								D		D	А			
Bromotoluene	D									С	А			
Butadiene	С	А	D	А	А	А	С	D	С	D	А	А		
Butane	А	А	С	А	А	А	А	D	С	D	А	А	В	
Butanediol			Α			А			D	В	А			
Butter			Α	А	N/A	А	А	В	А	В	А	А		
Buttermilk	А	В	Α	А	N/A	А	А			А	А	А	А	
Butylene		В	С	А	А	А	В	D	D	С	А	А		
Butyl Acetate	В	А	С	А	В	D	D	D	В	В	А	В	Α	
Butyl Acetate (pure)	D					D			Α		А			
Butyl Acetate (saturated)	D					D	С		D		А			
Butyl Amine	D			С	А	D	С	В	D	А	А		В	
Butylebenzine						Α	D				А			
Butyl Benzorte						А	D		А	С	А			
Butyric Acid	С	В	С	А	А	С	D		В	А	А	В	В	
Calcium Bisulfate				N/A	N/A			А		С	А	А		
Calcium Bisulfide	А	А		D	А	А	А		С	D	А	В		
Calcium Bisulfite	В	А	Α	D	А	А	А	А	D	D	А	А	В	
Calcium Carbonate	А	А	В	А	А	А	А	А	А	А	А	В	В	
Calcium Chlorate				А	А	А	С		А	А	А			
Calcium Chloride	Α	А	В	D	А	А	Α	А	А	А	Α	В	В	
Calcium Hydroxide	Α	А	В	D	Α	А	В	Α	Α	А	Α	В	Α	
Calcium Hyprochloride	А	С	В	D	А	А	В	В	В	А	А	С	В	
Calcium Sulfate	Α	D	В	D	А	А	Α		А	А	А	В	В	
Calgon	А	А		А	N/A	А	А		А	А	А	А		
Cane Juice	С	А		А	А	А	Α	Α	А	А	А	А		
Carbolic Acid	В	D	В	D	А	Α	С	D	В	А	Α	В		
Carbon Bisulfide	С	А	D	А	N/A	А	С		D	D	А	В		
Carbon Dioxide (wet or dry)	А	А	В	А	А	А	С	В	В	А	А	А	А	
Carbon Monoxide	Α	А	Α	А	В	Α	Α	А	А	А	Α	А	Α	
Carbon Tetrachloride	D	С	D	В	А	В	С	D	D	D	А	В	В	
Carbonated Water	В	А	Α	А	N/A	А	А			А	А	А		
Carbonic Acid	А	А	Α	В	А	А	В	А	А	А	А	В	А	

CHEMICAL RESISTANCE GUIDE TABLES

		Р	lastic	:S			E	lasto	omer	s		All	oys
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Casein						Α	А		А	Α	А		
Catsup	А	А		В	N/A	А	А			А	А		А
Caustic Lime						В	А		А		А		
Caustic Potash	А					D	А		А		А		В
Caustic Soda	А					В	С		А		А		А
Chloral Hydrate	Α	D				Α	С				А		
Chloracetic Acid	С	D		D	А	D	С		В	D	А	С	А
Chloric Acid		D	С	D	N/A		D				А	С	
Chloric Acid, 20%	D			D	N/A						А		
Chlorinated Glue				D	N/A	Α	С		В		А	А	
Chlorine Dioxide	С					D				D	А		
Chlorine (dry)	С	D	В	D	А	С	D	D	В	С	А	В	В
Chlorine Gas (dry)	D					В	С		D	С	В		
Chlorine Gas (wet)	D					С	С		D	С	А		
Chlorine (liquid)	С	D	С	А	А	А	С			D	А	D	А
Chlorine Water	С		А	D	В	Α	С		В	D	А	С	В
Chlorobenzene (Mono)	С	В	С	D	А	А	D	D	D	С	А	В	В
Chloroform	С	D	С	А	А	А	D	D	D	С	А	А	Α
Chlorosulfonic Acid	D	D	D	D	D	D	D	D	D	С	А	D	А
Chlorox Bleach	D	А	В			А	В		В		А	А	
Chocolate Syrup	А	А		А	N/A	А	А				А	А	
Chresylic Acid, 50%			D			А	D			А	А		
Chrom Alum	С		А			А	А	А			А		
Chromic Acid, 05%	В	D	В	D	А	А	D	С	А	А	А	А	Α
Chromic Acid, 10%	С	D	А	D	А	В	D	С	В		А	В	Α
Chromic Acid, 20%	С	D	А			В	С	С	В		А		
Chromic Acid, 30%	С	D	А	D	А	Α	D	С	В		А	В	
Chromic Acid, 50%	С	D	С	D	А	Α	D	С	В	Α	А	В	D
Chrominium Alum	А					Α			А		А		
Cider	А		В	Α	N/A	А	А			Α	А	А	
Citric Acid	А	А	А	В	А	Α	А	А	А	А	А	А	А
Citric Oils	А			В	N/A	Α	А		В	С	А	А	
Cobalt Chloride						А	А	В	А	А	А		
Coconut Oil	А		А			Α	А	А	А	В	А	А	
Coffee	А	А		А	N/A	Α	А	А	А	А	А	Α	
Copper Chloride	А	А	В	А	А	А	А	А	А	А	А	С	В
Copper Cyanide	А	А	А	А	А	Α	А	А	А	А	А	А	В
Copper Fluoborate				В	N/A	А	В			А	А	D	В
Copper Nitrate	А	D	В	А	А	А	А			А	А	В	С
Copper Sulfate	А	С	В	D	А	А	А	А	А	А	А	В	В

		Р	lastic	cs			E	Elasto	omer	s		Alle	oys
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Cream	А	А		А	N/A	Α	А				А	А	
Cresols	D	D	С	D	А	А	D	D	D		А	А	В
Cresylic Acid	D	D	В	D	В	Α	D	D	D		А	А	В
Cyanic Acid				D	N/A	Α	С				А		
Cyclohexane	С	А	В	А	А	Α	В	D	D	С	А	А	В
Detergents	В	А	А	А	А	А	А	А	А	В	А	А	В
Diacetone Alcohol	А			N/A	D	D	D	D	А	В	А		
Diazo Salts	А		А								А		
Dibutyl Amine						С	С	С	D	С	А		
Dibutyl Ether						С	С	D	С	В	А		
Dibutyl Phthalate	В	А				В	D	В	А	В	А		В
Dibutyl Sebacate						С		В	В	В	А		
Dichlorethane	А	С	С			С				D	А	В	
Dichloromethane						В	D		D		A		
Diesel Fuel	В		С	А	A	Α	A	D	D		A	Α	В
Diethylamine	В	Α	D	В	D	С	С	В	В	С	A	В	
Diethyl Ether	В			N/A	A	С	D	D	С	В	Α		В
Diethyl Oxide						D	В		D		Α		_
Diethylene Glycol	Α	А	В	Α	A	A	A	D	A	Α	Α	Α	
Diglycolic Acid	Α	1		D	A	A	^ \		Α	, (	Α	, (	
Diisobutyl Ketone	/ /				1	D			D	В	Α		
Diisobututylene						A		D	D		A		
Diisooctyl Phthalate						В			В	С	A		
Diisopropyl Ketone						D	 	D	В	С	Α		
Dimethyl Amne	Α					D	В		С		Α		
						A	D		D		Α		
Dimethyl Benzene Dimethyl Ether				D	D	В	В		В		A		
Dimethyl Formamide	А	А				С	В	В	В		A		
Dimethyl Ketone						D	D		Α		Α		
Dimethyl Phthalate				D	D	В	С		В		Α		
Dimethylamine	Α					D			D		Α		
Dioctyl Phthalate	D		D			A	D	С	В		A		
Dioxane	В	Α				D	D	D	Ť		Α		
Diphenyl Oxide	D	7.	D	D	В	A	D	С	D	С	Α	В	
Dyes	Ť	А		С	N/A	Α	Ť		Ť		Α	А	
Epsom Salts	Α	Α	Α	В	A	A	Α	Α	Α	Α	Α	В	Α
Ethane	С	D	D	A	A	A	A	D	D	С	A	А	A
Ethanolamine	В	A		A	N/A	D	В	В	В	A	A	A	В
Ether	D	A	С	D	C	С	D	D	С	С	A	В	В
Ethyl Alcohol	В	A	В	A	В	D	D	В	В	A	A	В	A
							-		-				_
Ethyl Chloride	C	Α	В	Α	D	Α	A	D	A	D	A	Α	В

		Р	lastic	CS			E	lasto	omer	'S		All	oys
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Ethylene Chloride	С	В	С	А	А	В	D	D	D	D	А	Α	В
Ethylene Dichloride	В	В	С	А	А	А	D	D	С	D	А	А	А
Ethylene Glycol	А	В	А	В	А	А	А	А	Α	D	А	А	В
Ethylene Oxide	С	А	С	В	А	D	D	D	С	А	А	С	
Fatty Acids	В	А	В	S	А	D	D	D	С	А	А	А	Α
Ferric Chloride	В	С	А	А	А	А	В	В	Α	В	А	С	С
Ferric Nitrate	В	А	В	D	А	А	А	С	Α	А	А	А	В
Ferric Sulfate	В	А	А	D	А	А	А	В	А	А	А	А	В
Ferrous Chloride	А	С	А	D	А	А	А			А	А	С	D
Ferrous Sulfate	А	С	А	D	А	Α	А		Α	А	А	В	В
Flouboric Acid	А	D	В	D	А	Α	А		Α	А	Α	С	А
Fluorine	С	D	С	А	А	В	С	D	Α	А	А	С	В
Fluosilic Acid	А	D	В	D	А	А	А	В	Α	D	А	В	
Formaldehyde	С	D	В	А	А	D	С	В	А	А	А	А	В
Formaldehyde, 40%	А	С	А	А	А	А	В		А	А	А	А	В
Formic Acid	А	С	В	А	А	С	В	В	А		А	С	В
Freon 11	D	D	С	А	А	Α	В	D	D	А	Α	А	
Freon 12	D	D	С	D	А	В	А	D	В	В	А	А	
Freon 22	А	В	А	В	Α	D	D	D	Α	D	Α	Α	
Freon 113	D		D	А	А	В	А	D	D	D	А	А	
Freon T.F.	D	D	D	А	В	В	Α	D	D	D	Α	А	
Fructose	А		А	А	В	А	А		Α	D	Α	А	
Fruit Juice	А	А	V			А	Α				Α	А	
Fruit Pulp	А		Α	D	Α	Α					Α	А	
Fuel Oils	В	А	D			Α	Α	С	D		Α	А	В
Furan Resin	D		D	А	В	D	D	D	С	С	Α	А	Α
Furfural	С	В	D	D	D	D	D	D	В		Α	Α	В
Gallic Acid	Α	В	D	А	В	Α	Α		Α	Α	Α	В	В
Gasoline	D	А	D	N/A	Α	В	Α	D	D	А	Α	А	Α
Gelatin	Α	А	Α	В	Α	Α	Α	А	Α	С	Α	А	В
Glucose	Α	В	Α	В	Α	Α	Α	А	Α	А	Α	Α	
Glue		Α	Α	А	А	Α	Α	А	Α	А	Α	А	
Glycerin	А	А	Α	А	N/A	Α	Α	Α	Α	А	Α	Α	Α
Glycerol	А	А	Α	А	А	А	Α	А	Α		Α	А	Α
Glycolic Acid	Α		Α			А	Α	А	Α	А	Α	А	В
Gold Monocyanide				А	В	А	Α			С	Α	Α	
Grape Juice		А	В	А	Α	А	Α			А	Α	А	
Grease				А	А	А	D			А	Α	А	
Heptane	С	А	С	D	А	Α	Α	D	D	В	Α	Α	В
Hexane	С	Α	С	А	Α	Α	Α	D	D	С	Α	Α	В

	Plastics				E	lasto	omer	'S		All	oys		
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Honey	Α	А	В	А	Α	Α	А				А	А	
Hydraulic Oil (Petroleum)	D	А	D	В	А	С	А	С	D	D	А	А	
Hydraulic Oils (Synthetic)	D	А	А	N/A	А	А	С			D	А	А	
Hydrazine	С			В	А	А	В	С	А	А	А	А	
Hydrobromic Acid, 20%	А	D	В	С	А	А		D	А	В	А	D	
Hydrobromic Acid	Α	D	Α	D	Α	Α	D	D	Α	В	Α	D	В
Hydrochloric Acid (dry gas)	В	А	А	N/A	А				С		А	D	В
Hydrochloric Acid, 20%	В	D	А	С	А	А	С	С	А	А	А	D	А
Hydrochloric Acid, 37%	В	D	С	С	А	А	В	В	А	В	А	D	В
Hydrochloric Acid, 100%	D	В		С	А	А	D	D	С		А	D	А
Hydrocyanic Acid	Α	С	Α	В	Α	Α	В	С	Α		Α	В	Α
Hydrocyanic Acid (gas 10%)	А			С	N/A	А	В		А		А		А
Hydrofluoric Acid, 20%	А	С	А	D	А	А	С	D	А	D	А	С	
Hydrofluoric Acid, 50%	А	D	А	D	А	А	С	D	А	D	А	D	В
Hydrofluoric Acid, 75%	С	D	С	D	А	А	D	D	С	D	А	D	В
Hydrofluosilicic Acid	Α	D	В	D	Α	Α	В	D	Α	D	Α	D	В
Hydrogen Gas	А	А	Α	А	Α	А	А	С	А		А	А	Α
Hydrogen Peroxide, 10%	В	С	А	N/A	А	А		В		А	А	В	D
Hydrogen Peroxide, 30%	В	D	С	D	А	А		В		А	А	В	D
Hydrogen Peroxide, 50%	В	D	С	D	А	А		В		А	А	А	С
Hydrogen Peroxide, 100%	В	D	С	D	А	А	В	В	А	А	А	А	А
Hydrogen Sulfate (aqua)	А	С	А	D	А	D	D	С	А	А	А	С	А
Hydrogen Sulfide (dry)	А	С	А	С	А	D	А	С	А	А	А	В	В
Hydroxyacetic Acid			Α	N/A	Α	А	Α		Α	А	А		
Hydroxyacetic Acid, 70%			А		А	А	А		А	А	А		
Hydroxylamine Sulfate	А			А	А				А		А		

CHEMICAL RESISTANCE GUIDE TABLES

176

		Р	lasti	cs			E	lasto	omer	s		Alle	oys
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Hydrochlourous Acid	А		А			В	D		В	А	А	D	
Ink	А	С	D	В	А	Α	А			А	А	А	
lodine	В	D	В	D	А	А	В		В	А	Α	С	В
Isotane	D	D		N/A	А	А	А				А		
Isopropyl Acetate	В	В	В	D	D	D	D		В	В	А	В	В
Isopropyl Ether	С	А	С	D	D	D	В	D	D	С	А	А	
Jet Fuel JP-3	А	А	С	А	В	А	А	D	D		А	А	А
Jet Fuel JP-4	В	А	С	А	В	А	В	D	D		А	А	А
Jet Fuel JP-5	В	А	С	А	В	А	А	D	D		А	А	А
Kerosene	А	А	С	А	А	А	А	D	D	С	А	А	А
Ketones	В	А	С	D	С	D	D	D	С	С	А	А	В
Laquer	В	А	С	D	D	D	D		D	С	А	А	
Laquer Thinner	В	А	В	D	N/A	D	D	D	А	С	Α	А	
Lactic Acid	А	С	В	В	В	Α	А	D	В	А	А	А	В
Lard	А	А	В	А	А	А	А	А	С	В	Α	А	А
Latex	А	А	Α	В	А	Α	А	В	В	А	А	А	
Lead Acetate	А	В	В	В	А	D	В		Α	А	А	В	В
Lead Chloride	А					Α		D	А		А		
Lead Nitrate	А			N/A	А	Α	А		Α		Α	В	В
Lead Sulfamate	А	В	А	А	А	А	В	В	А	А	А	В	
Ligroin	В	D	С	В	А	Α	А	В	С	В	А	А	
Lime	А	А	В	В	А	А	А	D	С	А	А	А	
Linoleic Acid	А			В	А	В	В	В	D	В	А	А	
Linseed Oil	А	А	D			А	А	В	В	В	А	А	А
Lubricants	А	А	D	А	А	Α	А	Α	D	D	А	А	В
Magnesium Carbonate	А		А	А	А	А	А	D	А	А	А	А	В
Magnesium Chloride	А	А	А	В	А	А	А		А	А	А	А	А
Magnesium Carbonate	А	В	А	А	А	А	А	А	А	А	А	А	В
Magnesium Nitrate	А	А	А	А	А	А	А	А	Α	А	Α	А	В
Magnesium Oxide				А	N/A		А			А	А	А	
Magnesium Sulfate	А	А	А	В	А	А	А		Α	А	А	В	А
Maleic Acid	А	В	В	Α	А	Α	D	А	D	А	А	В	В
Maleic Anhydride	D			D	А	А	D	В	D	А	Α		А
Mash		А		А	N/A	А	А		А	А	А	А	
Mayonnaise		А	В	А	А	А	А			А	А	А	
Melamine	А	А		А	N/A	А	С		А		А	D	
Mercuric Chloride	А	D	А	В	А	А	А			А	А	С	D
Mercuric Cyanide	А	А	А	N/A	А	А	А			А	А	В	D
Mercury	В	А	А	А	А	А	А		А	А	А	А	В

		Р	lastic	s			Е	lasto	mer	s		Alle	oys
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Methyl Acetate	D	А	В	В	В	D	D	D	В	В	А	А	В
Methyl Acrylate	D		В	В	В	D	D	D	В	D	А		
Methyl Acetone		А		D	D	А	D			В	А	А	
Methyl Bromide	С	С	D	D	А	А	D			D	Α	А	
Methyl Butyl Ketone	D	D	Α	D	D	D	D	D	Α	С	Α	А	В
Methyl Cellosolve	В	С	В	D	А	D	С	D	В	В	Α	А	
Methyl Chloride	D	С	С	В	А	Α	D	D	С	D	Α	А	В
Methyl Dichloride	D	С		D	D	А	D	D	D	D	Α		
Methyl Ethyl Ketone	А	А	В	С	D	D	D	D	Α	В	А	А	В
Methyl Isobutyl Ketone	С	А	А	N/A	D	D	D	D	С		А	А	
Methyl Isopropyl Ketone	D	D	D	N/A	N/A	D	D	D	В	С	А	А	
Methyl Methacrylate	D			D	В	D	D	С	D	В	А		
Methylamine	D			D	С	D	D		Е	А	А	А	
Methylene Chloride	В	С	С	В	В	В	D	D	D	D	Α	В	А
Milk	В	А	Е	А	А	А	А	А	Е	А	Α	А	Α
Mineral Oil	А	А	D	А	N/A	Α	А	В	D	D	Α	А	
Molasses	А	А	Е	А	В	А	А		С	А	А	А	А
Motor Oil	С			В	В	А	А		D		Α		
Mustard	А	А	А	С	А	D	С	А	Α	А	А	А	Α
Naptha	С	А	А	А	А	Α	С	D	D	С	А	А	В
Napthalene	В	А	Α	А	А	А	D	D	D	С	Α	В	
Natural Gas	А			В	N/A	Α	А	А	D	С	Α		
Neon						А	А	А	Α		Α		
Nickle Chloride	А	С	В	А	А	Α	А	А	Α	А	Α	С	Α
Nickle Sulfate	А	А	В	А	А	А	А	А	Α	А	Α	В	В
Nitric Acid, 5-10%	А	С	В	D	А	А	D	С	D	А	Α	А	D
Nitric Acid, 20%	А	D	С	D	А	А	D	D	В	В	А	А	D
Nitric Acid, 50%	D	D	С	D	А	А	D	D	D	С	А	А	D
Nitric Acid (concentrated)	D	D	С	D	А	А	D	D	D	С	А	А	
Nitrobenzene	В	В	С	С	А	В	D	D	D	В	А	А	С
Oil - Aniline	А	А		D	А	С	D	D	В	С	А	А	
Oil - Anise		А		D	N/A						А	А	
Oil - Bay				D	А	А					А	А	
Oil - Bone	А			D	А	А	А				А	А	
Oil - Castor	А	А		А	А	А	А	А	В	В	А	А	
Oil - Cinnamon		А		D	N/A	А				С	А	А	
Oil - Citric		А		А	А	А				С	А		

	Plastics				E	lasto	omer	S		All	oys		
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Oil - Clove		Α		N/A	N/A	Α	А			С	А	Α	
Oil - Cod Liver	Α			В	Α	Α	A	В	Α	С	А	Α	
Oil - Corn	А	А		А	Α	Α	А	А	С	D	А	Α	
Oil - Cotton Seed	А	Α	С	А	А	Α	А	А	С	В	А	Α	
Oil - Creosote	С	D	В	D	N/A	А	В	D	D	D	А	В	
Oil - Diesel Fuel	А	А	С	D	А	Α	А	D	D	D	А	Α	
Oil - Fuel	С	А	С	D	В	А	В	С	D	С	А	А	
Oil - Ginger		А	С	А	А	А	А		Α		А	Α	
Oil - Hydraulic	D	А		В	Α	Α	А	С	D	D	А	А	
Oil - Lemon		А	С	D	А	А			D	С	А	А	
Oil - Linseed	А	А		А	А	А	А	А	С	В	А	А	
Oil - Mineral	В	А	С	А	А	А	А	С	D	D	А	А	
Oil - Olive	А	А	В	А	N/A	Α	А	D	В	В	А	А	
Oil - Orange		Α	А	D	А	А	А	D			А	А	
Oil - Palm		Α		А	Α	Α	А			В	А	Α	
Oil - Peanut	D	А		А	Α	А	А	А	С	В	А	Α	
Oil - Peppermint		А		D	Α	Α	D			С	А	А	
Oil - Pine	D	А		А	А	А	В	D	Α	С	А	Α	
Oil - Rape Seed	D			А	Α	Α	В	D	Α	В	А	А	
Oil - Rosin	А	А		N/A	А	Α	А			А	А	Α	
Oil - Sesame Seed		Α	В	D	Α	Α	А			В	А	Α	
Oil - Silicone	А	А		А	Α	Α	А	С	Α	С	А	Α	
Oil - Soybean	А	Α	А	А	Α	Α	D	А	С	С	А	Α	
Oil - Sperm				D	Α	А	А			В	А	А	
Oil - Tanning				D	А	А	А				А	А	
Oil - Turbine	В		С	А	А	Α	В	D	D		А	Α	
Oleic Acid	А	В	D	А	А	А	В	D	С		А	В	В
Oleum	D	D	А	D	D	А	D	D		D	А	В	В
Oxalic Acid	А	В	А	В	В	А	В	В	А	А	А	В	
Oxygen Gas	А					А	С	В	А		А		
Ozone	С		С	С	А	А	D	А	А	А	А		
Palmitric Acid	А		В	А	А	А	А	D	В	В	А		Α
Paraffin	А	А	В	А	А	А	А		D	А	А	А	
Pentane	D	А	D	В	А	А	А	D	D		А	С	В
Perchloroethylene	С	С	D	В	А	А	D	D	D	D	А	А	
Petrolatum	С	D	В	В	А	А	А	С	С		А	А	
Phenols, 10%	В	D	А	В	А	В	D	D	С		А	В	
Phenols, 100%	А	D	В				D	D	D	А	А	А	
Phosgene Gas	С					D	D		Α		А		
Phosgene Liquid	D					D	D		А		А		
Phosphoric Acid, < 40%	А	D	В	D	В	А	С	D	В	А	А	А	А

		Р	lastic	:S			Е	lasto	omer	s		All	oys
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Phosphoric Acid, > 40%	А	В	А	D	В	А	С	С	В	С	А	В	В
Phosphoric Acid (crude)	В	В	С	D	А	А	С	С	В		А	С	А
Phosphoric Acid (molter)	D			D	D						А		С
Phosphoric Acid Anhydride	А			D	D						А		
Phosphorous Trichloride	С		А	D	А	С	D		С	В	А	А	D
Photographic Developer	А		В	D	N/A	А	А	А	В	А	А	А	
Phthalic Acid	D	В		С	А	Α			Α		А		В
Phthalic Anhydride	D			С	А	Α	С		А		Α	В	Α
Plating Solutions - Antimony	А			А	А	А	А			А	А	А	
Plating Solutions - Arsenic	А	А		А	А	А	А			А	А	А	
Plating Solutions - Brass	А	А	В	А	В	А	А			А	А	А	
Plating Solutions - Bronze	А	А		А	А	А	А		А	А	А	А	
Plating Solutions - Cadrium	А	С		А	А	А	А			А	А		А
Plating Solutions - Chrome	А	D		D	С	А		D		А	А		
Plating Solutions - Copper	А	С		С	А	А	А			А	А		А
Plating Solutions - Gold	А	А		N/A	N/A	А	А			А	А	А	
Plating Solutions - Indium	А	D		N/A	N/A	А	А			А	А	А	
Plating Solutions - Iron	А	D		N/A	N/A	А	А			А	А	А	А
Plating Solutions - Lead	А	D		N/A	N/A	А	А			А	А		А
Plating Solutions - Nickel	А	С		N/A	N/A	А	А			А	А		А
Plating Solutions - Silver	А	А		N/A	N/A	А	А		А	А	А	А	
Plating Solutions - Tin	А	D		N/A	N/A	А	А			А	А		А
Plating Solutions - Zinc	А	D		N/A	N/A	А	А			А	А		А
Potash	А	А	В	В	Α	А	Α				Α	А	
Potassium Bicarbonate	А	А	А	С	В	А	А			А	А	В	В

CHEMICAL RESISTANCE GUIDE TABLES

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	_	P	lasti	cs				Elasto	omer	's		All	oys	
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy	
Potassium Carbonate	А	А	А			А	А			А	А	В	В	Silver Bromide Silver Cyanide
Potassium Chlorate	А		Α	В	А	А				А	А	В	В	Silver Nitrate
Potassium Chloride	А	В	Α	А	А	А	А	А	А	А	А	В	В	Silver Salts
Potassium Chromate	А	А	Α	С	В	А	А			А	А	В	А	Silver Sulfate
Potassium Cyanide Solutions	А	А	Α	С	А	А	А	А	А	А	А	В	В	Soap Solutions
Potassium Dichromate	А	А	А	А	А	А	А	А	А	А	А	В	В	Sodium Acetate Sodium Aluminate
Potassium Ferrocyanide	А	D	А	N/A	А	А	А				А	В	В	Sodium Bicarbonate
Pottasium Hydroxide	А	В	А	А	А	В	В	С		А	А	В	В	Sodium Bisulfate Sodium Bisulfide
Potassium Iodide	A	С		N/A	A	Α	A		A		A		Α	Sodium Borate
Potassium Nitrate	Α		В	А	A	В	А	Α	А	А	A	В	D	Sodium Carbonate
Potassium Perborate	А	В	А	N/A	N/A						А			Sodium Chlorate
Potassium Perchlorate	A		А				А		А		А			Sodium Chloride Sodium Chromate
Potassium														Sodium Cyanide
Permanganate	Α		Α	Α	A	В	Α		Α	Α	A	В	В	Sodium Hydroxide,
Potassium Persulfate	А	D	А				А		А		А			20%
Potassium Sulfate	А		А	В	А	А	А	А	А	А	А	В		Sodium Hydroxide, 50%
Potassium Sulfide	А	А	А	N/A	А	А	А	А	А		А	А		Sodium Hydroxide,
Potassium Thiosulfate		А				А	А				А			80% Sodium
Propane	В			А	А	А	А	D	D	С	А	А		Hypochlorite, < 20%
Propanol		А				А	А		А		А			Sodium
Propargyl Alcohol	А		Α								А			Hypochlorite, 100%
Propyl Acetate						D	D	D	В	В	А			Sodium Hyposulfate Sodium
Propylene				N/A	N/A	А	D	D	D	В	А			Metaphosphate
Propylene Dichloride	С		С			D	D		D		А			Sodium Metasilicate
Propylene Glycol	Α		В	В	N/A	А	А		Α	А	Α	А	В	Sodium Nitrate
Pyridine	А	А	В	В	D	D	D	D	В	А	А	А	А	Sodium Perborate
Pyrogalic Acid	А			D	А	А					А	В	В	Sodium Peroxide
Rosins	А	А	В	В	N/A	А	А			А	А	А	А	Sodium Phosphate
Rum	А	А		А	N/A	А	А		А	А	А	А		Alkaline
Rust Inhibitors	А			А	N/A	А	А			В	А	А		Sodium Phosphate Neutral
Salad Dressing	А	А		А	N/A	А	А			А	А	А		Sodium
Sea Water	А	А	Α	А	А	А	А	А	А	А	А	А	А	Polyphosphate
Sewage	Α			А	N/A	А	А	В	В	А	А	А		Sodium Silicate
Shellac (Bleached)	Α	А	Α	А	N/A		А			А	А	А		Sodium Sulfate
Shellac (Orange)	А	А	А	А	А		А			С	А	А		Sodium Sulfide
Silicic Acid	А		А			А	А				А			Sodium Sulfite
Silicone	А	А				А	А	С	А		А	А		

		Р	lastic	cs			Е	lasto	omer	s		Alle	oys
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Silver Bromide				С	N/A						А	В	В
Silver Cyanide	А					А			А		А		
Silver Nitrate	А	А	В	А	А	А	В	А	А	А	А	В	В
Silver Salts	А		А			А	А				Α	А	
Silver Sulfate	А			А	Α	Α	С		Α	А	Α		
Soap Solutions	Α	А	В	В	Α	А	Α	Α	Α		Α	В	В
Sodium Acetate	А	В	В	В	N/A	D	В	D	А	А	А	В	
Sodium Aluminate	А	А	А	А	Α	Α	А		Α	А	А	А	В
Sodium Bicarbonate	Α	А	А	В	Α	Α	В	D	Α	А	Α	В	В
Sodium Bisulfate	А	А	А	С	А	Α	В		Α	А	Α	В	В
Sodium Bisulfide	Α	А	А	N/A	А	А	А	А	Α	А	Α	В	
Sodium Borate	А	А	А	А	А	А	А	А	Α	Α	А	В	
Sodium Carbonate	А	В	В	А	Α	Α	А	А	А	А	Α	А	В
Sodium Chlorate	А	D	В	А	А	Α			Α	А	Α	В	
Sodium Chloride	А	А	А	D	Α	Α	А	А	А	А	Α	В	Α
Sodium Chromate		D		А	Α	Α	А			А	А	В	
Sodium Cyanide	А	А	А	N/A	N/A	Α	Α	А	Α		Α	А	
Sodium Hydroxide, 20%	А	А	А	А	А	В	В	В	А	А	А	А	А
Sodium Hydroxide, 50%	А	А	А	А	А	В	В	В	А	А	А	В	А
Sodium Hydroxide, 80%	А		В	D	А	В	В		А		А		В
Sodium Hypochlorite, < 20%	В	D	А	D	А	А	В	В	В		А	С	
Sodium Hypochlorite, 100%	В	D	В	D	А	А	В	В	В		А		
Sodium Hyposulfate				N/A	N/A						Α	А	Щ
Sodium Metaphosphate	А	А	А	В	А	А	А		А		А	А	
Sodium Metasilicate	А			D	N/A	А	А		А	А	А	А	А
Sodium Nitrate	Α	Α	Α	А	Α	А	В	D	Α	Α	Α	В	В
Sodium Perborate	Α	В	Α	В	N/A	А	В	В	Α	Α	Α	В	В
Sodium Peroxide	В	Α	Α	D	Α	А	В	D	Α	В	Α	А	С
Sodium Phosphate Alkaline	А	А				А	А		А		А		В
Sodium Phosphate Neutral	А	А		В	А	А	А		А	А	А		В
Sodium Polyphosphate	А	А	А	С	А	А	А	D	А	А	А	В	
Sodium Silicate	А	А	Α	В	А	А	А		А	А	А	А	С
Sodium Sulfate	Α	А	Α	В	А	А	А	Α	Α	А	Α	В	В
Sodium Sulfide	Α	А	Α	N/A	Α	А	А	А	Α	А	Α	В	В
Sodium Sulfite	А	D	В			А	А	А	А		А	В	D

		Р	lastic	CS			E	lasto	omer	'S		All	oys
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Sodium Tetraborate		А	А	В	N/A	А	А			А	А	А	
Sodium Thiocyanate			А			А		А	D		А		
Sodium Thiosulfate	А	В	А	С	А	Α	В		Α	А	А	А	
Sorghum		А		А	N/A	А	А			А	А	А	
Soy Sauce		А		А	N/A	А	А			А	Α	Α	
Soybean Oil			А			Α			Α	С	А	А	
Stannic Chloride	Α	В	А	С	Α	Α	А	В	Α	А	Α	D	В
Stannic Fluoborate				С	N/A	Α	А				А	А	
Stannous Chloride	А	С	В	N/A	А	А	А	В	В	В	А	Α	В
Starch	А	А	В	А	N/A	А	С		А	А	А	А	
Stearic Acid	А	А	В	А	А	А	В	В	С	А	А	А	С
Stoddard Solvent	С	Α	С	А	Α	А	А	D	D	D	А	А	
Styrene		Α		А	N/A	С	D	D	D	С	А	А	
Sugar (liquids)	А	Α		А	N/A	Α	A	Α	Α	А	А	Α	В
Sulfate Liquors	Α	В	А	D	Α	Α	A		Α	Α	Α	В	В
Sulfur	D	Α	В			Α	С		С	А	А		
Sulfur Chloride	С	Α	С	D	Α	Α	D	С	D	D	Α	D	Α
Sulfur Dioxide (dry)	А	В	А	В	Α	Α	D	В	Α	А	А	Α	В
Sulfur Dioxide (wet)	Α	С	В	В	Α	Α	D	В	Α	Α	Α	Α	D
Sulfur Trioxide	D	Α	С	N/A	N/A	Α	D	В	С	D	А	Α	
Sulfuric Acid (to 10%)	А	С	А	D	А	А	D	D	В	А	А	В	С
Sulfuric Acid (10-75%)	А	D	А	D	А	А	D	D	В	А	А	D	С
Sulfuric Acid (75-95%)	С	D	В	N/A	А	А	D	D	А	А	А	D	С
Sulfuric Acid (95-100%)	С	D	В	N/A	А	А	D	D	D	В	А	D	А
Sulfurous Acid	Α	D	В	С	Α	Α	В	D	В		Α	С	С
Syrup	Α					Α	Α			А	Α	Α	
Tallow	А	А	С	А	N/A	Α	А			В	А	А	
Tannic Acid	А	С	В	В	В	А	А	В	Α		А	А	В
Tanning Liquors	А	А	А	В	N/A	А	А		В		А	А	В
Tartaric Acid	А	В	А	В	В	А	А	А	В	А	А	С	В
Tetrachlrethane	С	С		А	А	А	D	D			А	А	
Tetrahydrofuran	С	А	С	А	В	D	D	В	D	В	А	А	В
Toluene, Tuluol	С	А	С	С	А	А	D	D	В	D	А	А	Α
Tomato Juice	А	А	А	В	А		А		D	А	А	А	Α
Trichloroethane	С	С		А	А	А	D	D	D	D	А	А	
Trichloroethylene	С	С	С	D	В	А	С	D	D	D	А	В	В
Trichloropropane				А	N/A	А	А			D	А	А	А
Tricresylphosphate	Α	Α	В	С	D	В	D	С	Α		А	Α	

		P	lastic	cs			E	lasto	omer	'S		All	oys
	Polypropylene	Nylon	Polyethylene	Acetal Copolymer	Kynar	FKM	Buna	Silicone	EPDM	EP/PP blend	FFKM	316 stainless steel	Hastelloy
Triethylamine	D	А		D	А	Α	А		А	D	А	А	
Turpentine	В	А	С	А	А	Α	А	D	D	D	А	А	В
Urine	А	А	А	А	А	Α	А		А	А	А	А	
Varnish	А	С	С	А	N/A	Α	В	D	D	D	А	А	А
Vegetable Juice		А		А	N/A	Α	С			А	Α	С	
Vinegar	А	С	В	В	В	А	В	А	А	А	А	А	В
Vinyl Acetate				N/A	А	D	D		В	В	А		
Vinyl Chloride		А		N/A	В	Α	D		С		А		А
Water, Acid Mine	А	В	А	А	А	Α	А	В	Α	А	Α	А	А
Water, Deionized	А		А	N/A	А	А	А		А	А	А	А	В
Water, Distilled	А	А	А	В	А	Α	А		Α	Α	А	А	А
Water, Fresh	А	А	А	А	А	Α	А	В	А	А	А	А	А
Water, Salt	А	А	А	А	А	Α	Α		Α	Α	А	А	А
Weed Killers		А		А	N/A	А	В				А	А	
Whey				А	N/A	А	Α		Α	Α	Α	А	
Whiskey & Wines	А	А		А	А		А	А	А	А	А	А	
Xylene	С	А	С	А	А	В	D	D	D	D	Α	А	В
Xylol	D					А	С	D	D	D	А		
Yeast	А		А			Α	А				А		
Zeolite						Α	А		В	А	А		
Zinc Acetate	А					С	В		Α	А	Α	В	
Zinc Chloride	А	С	А	С	А	Α	А	D	А	А	А	С	В
Zinc Hydrosulphite		А		С	N/A		А		Α	А	Α	А	
Zinc Sulfate	А	С	В	С	А	Α	А	А	Α	А	А	А	В
Zirlite	А		В	С	Α	С	В		Α		Α		



## 11 Additional Information

CONVERSION DATA

To Convert	То	Multiply By
Bar	Psi	4.5
Centimeters	Inches	0.3937
Centimeters	Feet	0.03280
Centimeters	Meters	0.01
Centimeters	Millimeters	10
Cubic centimeters	Cubic feet	3.53x10-5
Cubic centimeters	Cubic inches	6.102x10-2
Cubic centimeters	Cubic meters	10-6
Cubic centimeters	Cubic yards	1.308x10-6
Cubic centimeters	Gallons	2.642x10-4
Cubic centimeters	Liters	10-3
Cubic centimeters	Pints (liquid)	2.113x10-3
Cubic centimeters	Quarts (liquid)	1.057x10-3
Cubic feet	Cubic centimeters	2.832x104
Cubic feet	Cubic inches	1728
Cubic feet	Cubic meters	0.02832
Cubic feet	Cubic yards	0.03704
Cubic feet	Gallons (US)	7.48052
Cubic feet	Gallons (imperial)	6.23
Cubic feet	Liters	28.32
Cubic feet	Pints (liquid)	59.84
Cubic feet	Quarts (liquid)	29.92
Cubic foot water	Pounds	62.4
Cubic foot water	Ounces	998.8
Cubic foot water	Kilograms	28.315
Cubic inches	Cubic centimeters	16.39
Cubic inches	Cubic feet	5.787x10-4
Cubic inches	Cubic meters	1.639x10-5
Cubic inches	Cubic yards	2.143x10-5

To Convert	То	Multiply By
Cubic inches	Gallons	4.329×10-3
Cubic inches	Liters	1.639x10-2
Cubic inches	Pints (liquid)	0.03463
Cubic inches	Quarts (liquid)	0.01732
Feet	Centimeters	30.48
Feet	Inches	12
Feet	Meters	0.3048
Feet	Yards	1/3
Feet of water	Atmospheres	0.02950
Feet of water	Inches of mercury	0.8826
Feet of water	Kilograms per cm <sup>2</sup>	0.03048
Feet of water	Pounds per ft <sup>2</sup>	62.43
Feet of water	Pounds per in <sup>2</sup>	0.4335
Gallons (US)	Cubic centimeters	3785
Gallons (US)	Cubic feet	0.1337
Gallons (US)	Cubic inches	231
Gallons (US)	Cubic meters	3.785x10-3
Gallons (US)	Cubic yards	4.951x10-3
Gallons (US)	Fluid ounces	128
Gallons (US)	Liters	3.785
Gallons (US)	Pints (liquid)	8
Gallons (US)	Quarts (liquid)	4
Gallons (US)	Pounds of water	0.83267
Gallons (US)	Kilograms	1.20095
Gallons (US)	Imperial gallons	8.3453
Gallons (imperial)	US gallons	3.785
Gallons per minute	Cubic feet per second	2.228x10-3
Gallons per minute	Liters per second	0.06308
Gallons per minute	Liters per minute	3.785
Gallons per minute	Cubic feet per hour	8.028

To Convert	То	Multiply By
irams	Dynes	980.7
Grams	Grains	15.43
Grams	Kilograms	10-3
Grams	Milligrams	103
Grams	Ounces	0.03527
Grams	Ounces (troy)	0.03215
Grams	Pounds	2.205x10-3
Horsepower	B.T. units per minute	42.44
Horsepower	Foot-lbs per minute	33
Horsepower	Foot-lbs per second	550
Horsepower	Horsepower (metric)	1.014
Horsepower	Kg calories per minute	10.70
Horsepower	Kilowatts	0.7457
Horsepower	Watts	745.7
Inches	Centimeters	2.54
Inches	Millimeters	25.4
Inches	Meters	0.0254
Inches	Feet	0.0833
Inches of mercury	Kilograms per cm²	0.03453
Inches of mercury	Pounds per ft <sup>2</sup>	70.73
Inches of mercury	Pounds per in <sup>2</sup>	0.4912
Inches of water	Atmosphere	0.002458
Inches of water	Inches of mercury	0.07355
Inches of water	Kilograms per cm <sup>2</sup>	0.02450
Inches of water	Ounces per in <sup>2</sup>	0.5781
Inches of water	Pounds per ft <sup>2</sup>	5.202
Inches of water	Pounds per in <sup>2</sup>	0.03613
Kilograms	Pounds	2.205
Kilograms	Tons (short)	1.102x10-3
Kilograms	Grams	103
Liters	Cubic centimeters	103
Liters	Cubic feet	0.03531

To Convert	То	Multiply By
Liters	Cubic inches	61.02
Liters	Cubic meters	10-2
Liters	Cubic yards	1.308x10-3
Liters	Gallons	0.2642
Liters	Pints (liquid)	2.113
Liters	Quarts (liquid)	1.057
Liters per minute	Gallons per minute	0.264
Meters	Centimeters	100
Meters	Feet	3.281
Meters	Inches	39.37
Meters	Kilometers	10-3
Meters	Millimeters	103
Meters	Yards	1.094
Millimeters	Centimeters	0.1
Millimeters	Inches	0.03937
Pounds (avoir.)	Ounces	16
Pounds (avoir.)	Drams	256
Pounds (avoir.)	Grains	7000
Pounds (avoir.)	Tons (short)	0.0005
Pounds (avoir.)	Grams	453.5924
Pounds (avoir.)	Pounds (troy)	1.21528
Pounds (avoir.)	Ounces (troy)	14.5833
Pounds (avoir.)	Kilograms	0.454
Pounds of water	Cubic feet	0.01602
Pounds of water	Cubic inches	27.68
Pounds of water	Gallons	0.1198
Pounds of water	Imperial gallons	0.1
Pounds per in <sup>2</sup>	Atmospheres	0.06804
Pounds per in <sup>2</sup>	Feet of water	2.307
Pounds per in <sup>2</sup>	Inches of mercury	2.306
Pounds per in <sup>2</sup>	Kilograms per cm²	0.07031
Pounds per in <sup>2</sup>	Bars	0.06895

## 11 Additional Information

WARRANTY & RETURNS POLICY

## Warranty

Xylem warrants that at the time of shipment the product manufactured by Xylem and sold hereunder ("the product") shall be in conformity with applicable written specifications and descriptions and will be free from defects in material and workmanship for a period of 1 year or period stated on the product packaging. The warranty will not extend to a product which becomes defective resulting from damage in the course of transportation or by storage operation, use, or maintenance in an environment not conforming to the instructions or specifications of Xylem, or if the product is altered or modified in any way.

Xylem's sole liability for breach of this warranty will be (at its option) to repair or replace the defective product.

Warranty is only valid with proof of purchase from an authorized Xylem dealer.

Please note that the warranty on the product is with the place of purchase. For further information on Xylem warranties or to make a warranty claim, please contact your local Xylem dealer or visit our website at: www.Xylem.com.

This warranty does not affect your statutory rights.

## **Returns Policy**

If you, or your customer, need to return a product for warranty consideration, the following steps should be followed for the best possible service.

- 1. Contact your local customer service center for a return material authorization (RMA) number. They will, whenever possible, trouble-shoot the problem with you or your customer to resolve the claim; but if the product has to be returned, use the RMA number given to you by the customer service representative.
- 2. When it arrives at our facility, we will review the problem, determine whether it is warranty or not, estimate cost and time required to repair the product, then contact you with this information.
- 3. For problems covered under our one year limited warranty, repairs will be completed or a replacement product will be returned to you.
- 4. For problems deemed non-warranty, we will request a written authorization from you for the estimated repair costs, repair the product, and return it with a detailed parts and labor breakdown and invoice for the charges.











## Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. We move, treat, analyze, and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

For more information on how Xylem can help you, go to www.xyleminc.com



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