# Model 17430-Series



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# **SELF-PRIMING PUMPS**

### **FEATURES**

**Body:** Glass-Filled Epoxy

**Impeller:** Neoprene, Nitrile or Viton\*

Shaft Seal: Mechanical, Carbon-on-Ceramic, Nitrile

**Ports:** 1/2" N.P.T. Internal

**Shaft:** Corrosion Resistant Steel with Epoxy

Drive Sleeve in Contact with Fluid

**Motor:** 115V AC, 1ø, 60 Hz, 1/2 HP, 1725

RPM, TEFC, Overload Protected, Capacitor Start, Three-pronged

Grounded Plug

**Weight:** 33-1/2 lb (15.3 kg)





Explosion hazard. Do not use where flammable vapors are present. Do not pump gasoline, solvents, thinners or other flammable liquids. To do so can cause an explosion resulting in injury or death.

### **VARIATIONS AVAILABLE**

MODEL NO. DESCRIPTION **17430-0003** Nitrite Impeller

17430-0004 Viton Impeller, Seal and O-Ring

## **APPLICATION**

Designed for transfers, circulation, spill returns, filtration and filling line use. Easily handles pure solutions, foaming liquids, emulsions, suspended solids, gels and metallic contamination, it is widely used for pumping photo chemicals, plating compounds, lab solutions, pharmaceuticals, cosmetics, weak acids, alkalize, liquid fertilizers, insecticides, dyes, detergents, waxes and many more. There is no pump metal part in contact with the fluid. Refer to the JABSCO Chemical Resistance Guide.

<sup>\*</sup> Viton is a registered trademark of Du Pont Elastomers L.L.C.

### **OPERATING INSTRUCTIONS**

- INSTALLATION: Pump may be mounted in any position. Inlet port is on the right and discharge port on the left when facing pump.
- SELF-PRIMING: Vertical dry suction lift of 6 feet with Nitrile impeller. Pump will produce suction lift up to 20 feet when wetted. BE SURE SUCTION LINES ARE AIRTIGHT OR PUMP WILL NOT SELF-PRIME.

NOTE: Viton impeller suction lift requirement should not exceed 3 feet.

- DISCHARGE LINE: When transferring liquids further than 25 feet, discharge line size should be increased to next available pipe size.
- RUNNING DRY: DO NOT RUN DRY. Unit depends on liquid pumped for lubrication. Lack of liquid will damage the impeller and void warranty.
- NOTICE: When pumping chemicals, consult Jabsco Chemical Resistance Table for proper body and impeller materials. Pump life is prolonged if pump is flushed with water after each use.
- CONTINUOUS OPERATION: For continuous operation, pressure should not exceed 20 psi.
- 7. TEMPERATURES:

Neoprene: 45° to 180° F ( 7° to 82° C) Nitrile: 50° to 180° F (10° to 82° C) Viton: 60° to 180° F (15° to 82° C)

 FREEZING WEATHER: Drain unit by loosening end cover. Glycol and alcohol based anti-freeze compounds are recommended. DO NOT USE PETROLEUM BASED ANTI-FREEZE COMPOUNDS OR RUST INHIBITORS.

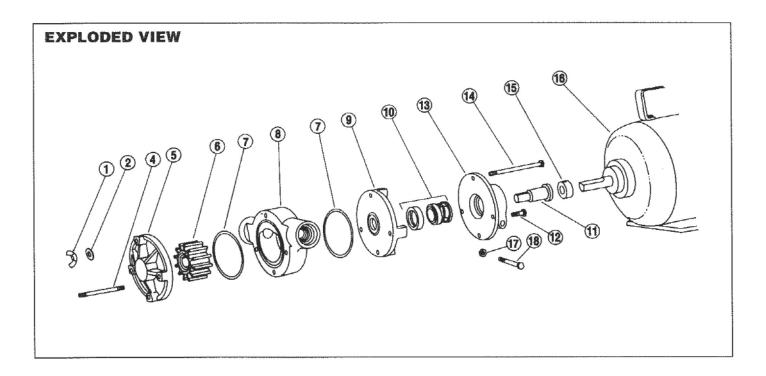
### SERVICE INSTRUCTIONS

### IMPELLER REPLACEMENT

- 1. Remove wing nuts, washers and end cover.
- Remove pump head from seal housing. Remove O-rings from body grooves.
- 3. Push impeller from body bore.
- Install new impeller in lubricated body bore by grasping hub and with a rotary motion push it into the body bore.
   Replace O-rings in body grooves.
- Position the body over the through bolts against the seal housing.
- Install end cover and secure with washers and wing nuts.

### SEAL REPLACEMENT

- 1. Remove wing nuts, washers and end cover.
- Remove pump head from seal housing. Remove O-rings from body grooves.
- 3. Push impeller from body bore.
- Remove seal housing. Insert screwdriver through seal seat bore and pry seat and grommet from seal housing.
- Remove drive sleeve from shaft.Remove seal and seal spring from drive sleeve.
- Install seal spring on drive sleeve.
   Lubricate seal with water and slide on drive sleeve with carbon facing away from spring. Install drive sleeve on shaft.
- Install ceramic seal seat in grommet with grooved face towards grommet.
   Lubricate outer grommet surfacer with water and push seal seat assembly into seal housing with ceramic seals facing out of seal seat bore.
   Assemble seat housing over through bolts so seal and seats faces contact.
- 8. Assemble impeller body and end cover as in steps 4, 5, and 6.



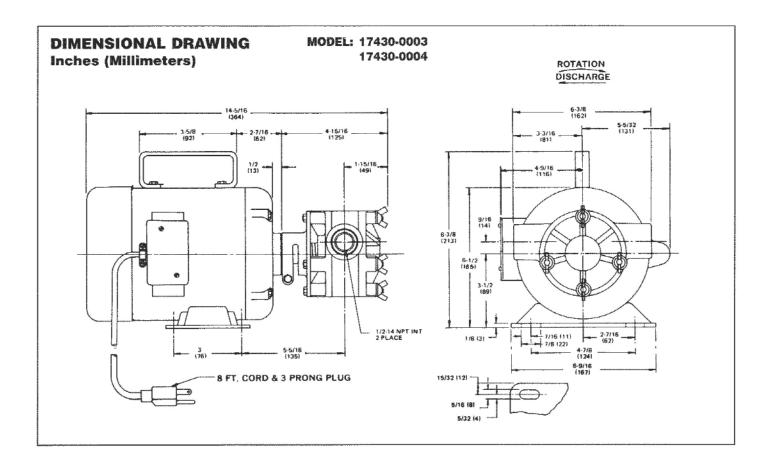
# **PARTS LIST**

Key	Description	Qty.	Part Number		
1	Wing Nut	4	91107-0030		
2	Washer	4	91601-0040		
4	Stud	2	91090-0040		
5	End Cover	1	17434-0000		
6	Impeller Nitrile		14281-003		
	Viton		14806-0004		
7	O-Ring Nitrile	2	92000-0310		
	Viton		92000-0880		
8	Body	1	14924-0000		
9	Seal Housing	1	14533-0010		
*10	Seal Assembly, Standard	1	96080-0280		
	Carbon/Ceramic, Viton		96080-0290		
11	Drive Sleeve	1	17006-0000		
12	Bolt	2	91095-0240		
13	Adapter	1	17433-0000		
14	Bolt	2	91094-0120		
15	Collar	1	98022-0700		
16	Motor	1	93004-1850		
17	Nut-Adapter	1	91105-0030		
18	Bolt-Adapter	1	91095-0090		
	Pump Head Kit Nitrile		17438-0003		
	Pump Head Kit Viton		17438-0004		

<sup>\*</sup> Available as optional part: Seal Assembly Carbon/Carpenter 20 with Viton 17221-0040

# **PUMP HEAD ONLY**

w/Nitrile Impeller 17438-0003 x/Viton Impeller 17438-0004



### **HEAD CAPACITY TABLE**

Total Head				Flow @ 500 RPM		Flow @ 1160 RPM			Flow @ 1750 RPM			
psi	kg per sq cm	Feet of Water	Meters of Water	GPM	L/Min	HP	GPM	L/Min	HP	GPM	L/Min	HP
4.3	0.3	10	3.0	3.5	13.2	1/6	7.5	28.4	1/4	11.3	42.8	1/2
8.7	0.6	20	6.1	3.1	11.7	1/6	6.7	25.4	1/4	10.2	38.6	1/2
13.0	0.9	30	9.1	2.6	9.8	1/6	5.5	20.8	1/3	9.0	34.1	1/2
21.6	1.5	50	15.2	_	_	******		_	_	5.2	19.7	1/2

**NOTE:** Table shows approximate head flow for new pumps with neoprene impeller. Capacities reduced approximately 10% with nitrile and viton impellers. Do not operate viton impeller above 15 psi.



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