



Model 17430-Series


## 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, 1 $\phi$ , 60 Hz, 1/2 HP, 1725 RPM, TEFC, Overload Protected, Capacitor Start, Three-pronged Grounded Plug |
| Weight:     | 33-1/2 lb (15.3 kg)                                                                                                 |



Model 17430-Series

|                                                                                     |                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <b>WARNING</b> 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.

\* Viton is a registered trademark of Du Pont Elastomers L.L.C.

## OPERATING INSTRUCTIONS

- 1. INSTALLATION:** Pump may be mounted in any position. Inlet port is on the right and discharge port on the left when facing pump.
- 2. 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.
- 3. DISCHARGE LINE:** When transferring liquids further than 25 feet, discharge line size should be increased to next available pipe size.
- 4. RUNNING DRY: DO NOT RUN DRY.** Unit depends on liquid pumped for lubrication. Lack of liquid will damage the impeller and void warranty.
- 5. 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.
- 6. 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)
- 8. 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

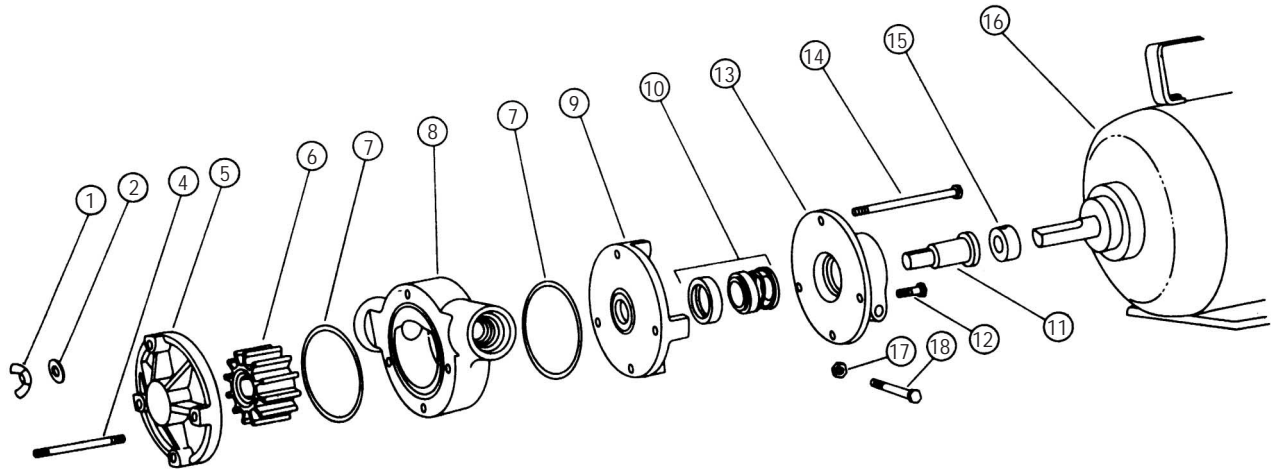
### IMPELLER REPLACEMENT

1. Remove wing nuts, washers and end cover.
2. Remove pump head from seal housing. Remove O-rings from body grooves.
3. Push impeller from body bore.
4. 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.
5. Position the body over the through bolts against the seal housing.
6. Install end cover and secure with washers and wing nuts.

### SEAL REPLACEMENT

1. Remove wing nuts, washers and end cover.
2. Remove pump head from seal housing. Remove O-rings from body grooves.
3. Push impeller from body bore.
4. Remove seal housing. Insert screwdriver through seal seat bore and pry seat and grommet from seal housing.
5. Remove drive sleeve from shaft. Remove seal and seal spring from drive sleeve.
6. 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.
7. 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.

EXPLODED VIEW



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                |      | 14281-003<br>Nitrile<br>Viton<br>14806-0004  |
| 7   | O-Ring                  | 2    | 92000-0310<br>Nitrile<br>Viton<br>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           |      | 17438-0003<br>Nitrile                        |
|     | Pump Head Kit           |      | 17438-0004<br>Viton                          |

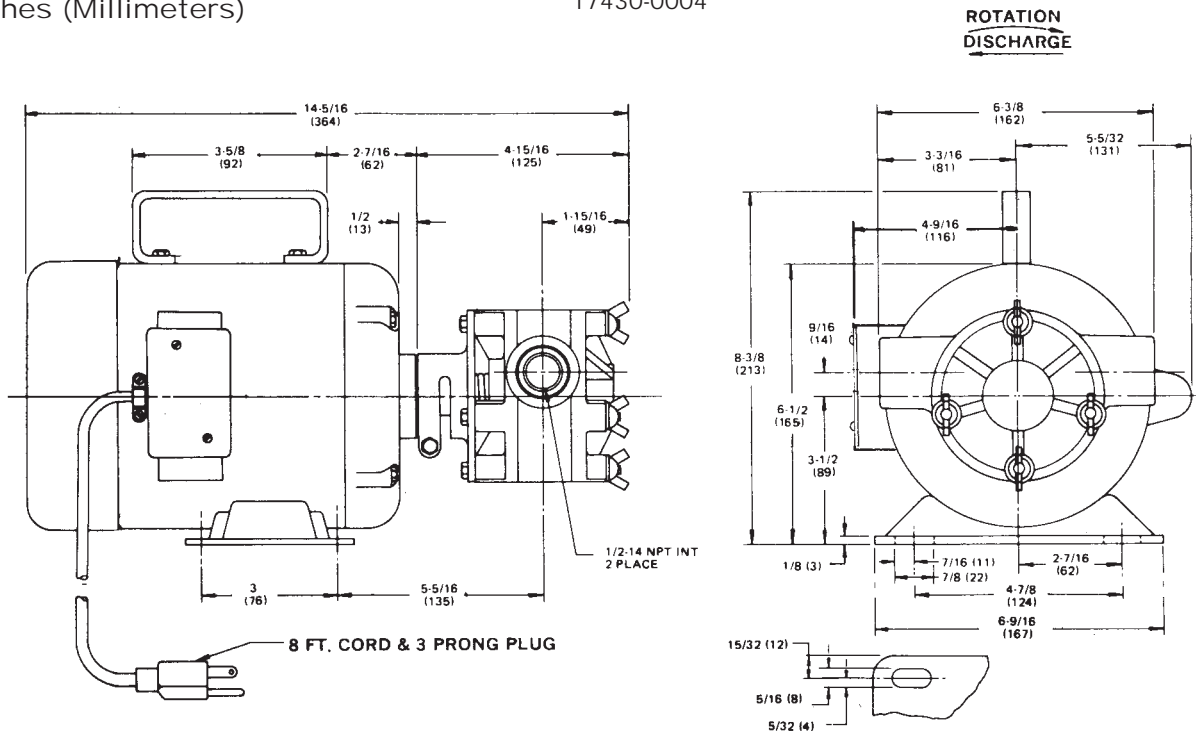
\* Available as optional part: Seal Assembly Carbon/Carpenter 20 with Viton 17221-0040

PUMP HEAD ONLY

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

**DIMENSIONAL DRAWING**  
Inches (Millimeters)

MODEL: 17430-0003  
17430-0004



**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.

**Jabsco**



THE PRODUCTS DESCRIBED HEREIN ARE SUBJECT TO THE JABSCO ONE YEAR LIMITED WARRANTY, WHICH IS AVAILABLE FOR YOUR INSPECTION UPON REQUEST.

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