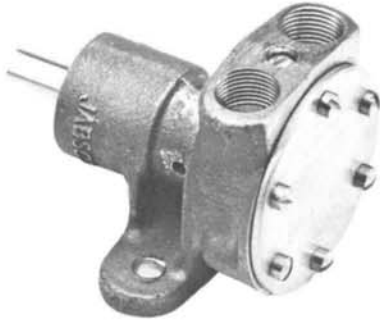


## Model 22940-2001



### DESIGN FEATURES

<b>Body</b>	Seawater resistance bronze
<b>Impeller</b>	Jabasco neoprene compound
<b>Shaft</b>	Stainless steel 316 S16 to BS 970
<b>Wearplate</b>	Replaceable
<b>Shaft Seal</b>	Lip Type
<b>Bearings</b>	Ball Bearings
<b>Ports</b>	$\frac{3}{8}$ " BSP to BS21 (DIN 2999)
<b>Weight</b>	.7Kg (1.5lb)

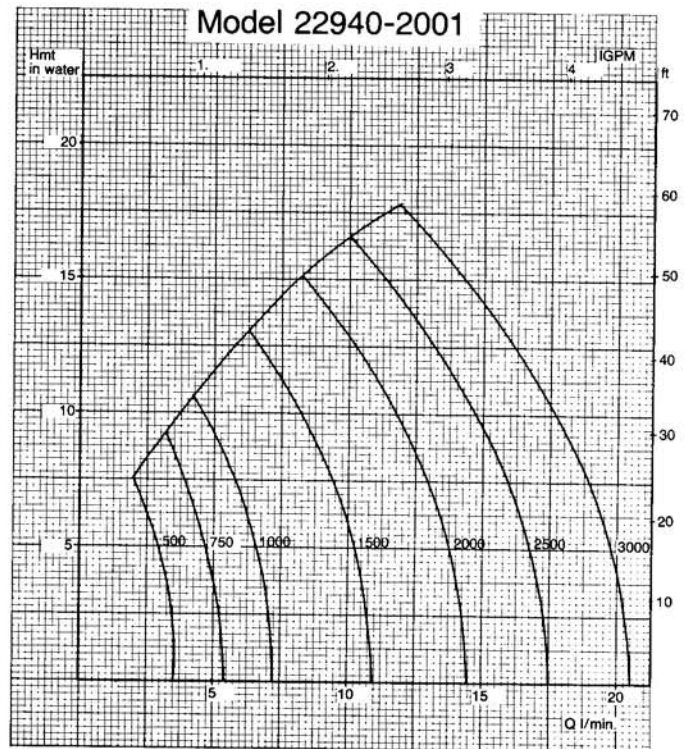
### Typical Applications

#### Industrial

circulating and transferring liquids  
 velocity-mixing  
 pumping coolants on machine tools  
 returning spilled liquids to process  
 pumping waste water to sewer  
 cellar, yard and sump drainage  
 chemical manufacturers and pharmaceutical houses—to pump: soap, liquors, ink, dyes, medicines, alcohol, various acids, tanning liquors, glycerine, lotions, brine, etc.

#### Marine

circulating water in bait tanks  
 utility dock side pump  
 circulating engine raw water.



### PERFORMANCE

Note. Power (Watt) figures shown are minimum recommended at pumpshaft.

Total manometric head (water)	500 RPM 50 Watt	750 RPM 60 Watt	1000 RPM 90 Watt	1500 RPM 120 Watt	2000 RPM 180 Watt	2500 RPM 250 Watt	3000 RPM 370 Watt
Metres	Feet	l/min	igpm	l/min	igpm	l/min	igpm
3	9.8	3.3	0.73	5.2	1.14	7.0	1.54
6	19.7	2.6	0.57	4.5	0.99	6.3	1.38
9	29.5	—	—	3.3	0.73	5.1	1.12
12	39.4	—	—	—	—	—	7.0
15	49.2	—	—	—	—	—	8.3
18	59.1	—	—	—	—	—	—
★ Suction Pipe		10mm (3/8")	10mm (3/8")	10mm (3/8")	10mm (3/8")	13mm (1/2")	13mm (1/2")

	Temp °C	Metres	Feet	Metres	Feet	Metres	Feet	Metres	Feet	Metres	Feet	Metres	Feet	Metres	Feet
Maximum Suction Head at Water	20	5.6	18.4	5.4	17.7	5.2	17	4.8	15.7	4.1	13.4	3.6	11.8	3.0	9.9
Temperature °C	30	5.4	17.7	5.2	17	5.0	16.4	4.6	15.1	3.9	12.8	3.4	11.2	2.8	9.3
in metres (feet)	40	5.0	16.4	4.8	15.7	4.6	15.1	4.2	13.8	3.5	11.5	3.0	9.9	2.4	7.9
of water	50	4.4	14.4	4.2	13.7	4.0	13.1	3.6	11.8	2.9	9.5	2.4	7.9	1.8	5.9

Pump Selection Table and graph show approximate performance for new pump with neoprene impeller pumping water (specific gravity 1.00) at 20°C, but note that performance can be affected if water temperature and suction head are higher than shown in above table. If in doubt consult your local Jabasco distributor or factory for application assistance. ★ Minimum nominal recommended bore

# Exploded View and Parts List

**EXPLODED VIEW**

Insist on genuine Jabsco parts,  
made only by the original and world's leading manufacturer of self-priming flexible neoprene impeller pumps.

PARTS LIST			
Key	Description	Qty	Part No.
1	End Cover Screw	6	SP1002-01
2	End Cover Blank	1	9566
3	Gasket	1	1189
4	Impeller Screw	1	SP1009-05
5	Impeller	1	4528-0001
6	Wearplate	1	2765
7	'O' Ring	1	SP2000-25
8	Cam Screw	1	SP1002-03
9	Cam	1	2763
10	Body	1	22944-2000
11	Seal	1	SP2700-11
12	Ball Bearing	1	Y5052-43
13	Retaining Ring	1	SP1700-251
14	Ball Bearing	1	Y5052-43
15	Retaining Ring	1	X3086-026A
16	Seal	1	Y5016-09
17	Seal	1	SP2700-11
18	'O' Ring	1	SP2000-56
19	Shaft	1	22947-000

SERVICE KIT	
Pump model number	Service kit number
22940-2001	SK23
Service Kit includes: Impeller, End Cover Screws Gasket, 'O' Ring, Seal	

## Technical Data



# Service Instructions

## DISASSEMBLY

- 1 Remove end cover screws, end cover and gasket.
- 2 Remove impeller.
- 3 Remove wearplate.
- 4 Loosen cam screw and remove cam. (Clean off old jointing compound using a solvent.
- 5 Remove seal and 'O' ring with hooked wire.
- 6 Insert screwdriver between OD of outer bearing seal and pump bore and pry seal out.
- 7 Remove bearing to body retaining ring.
- 8 Press on impeller drive end of shaft to remove shaft and bearing assembly. Heating outside of body at bearing will ease disassembly.
- 9 Lever bearings apart and remove from shaft.
- 10 Using extreme care not to mar body bore, insert screwdriver between OD of inner bearing seal and pump bore and pry the seal out.

*Note: Inspect all parts for wear or damage and replace if necessary.*

## ASSEMBLY

- 1 Lubricate inner bearing seal with grease and press into body bearing seal bore with lip facing away from bearing bore.
- 2 Push bearings onto shaft and up against retaining ring.
- 3 Position slinger ('O' ring) in body drain area. Insert slotted end of shaft through bearing bore and guide slinger over shaft until bearings contact body.
- 4 Pressing on bearing outer race, install bearings into bore. Heating outside of body at bearing area will ease assembly.
- 5 Install bearing to body retaining ring in body groove.
- 6 Lubricate outer bearing seal with grease and press into bearing bore until it is flush with the body.
- 7 Install 'O' ring in groove in seal bore.
- 8 Lubricate OD and lip of seal, then push into place, using care not to damage or cut seal lip. (Lip faces impeller bore.)
- 9 Install wearplate in body bore.
- 10 Coat screw threads, top side and back end of cam with a non-setting jointing compound. Install in body with cam screw, aligning dimple in wearplate with slot in cam.
- 11 Thread impeller drive screw into impeller.
- 12 Lubricate impeller bore with a light coat of good quality grease and start impeller into bore with a rotary motion until impeller drive screw engages with slot in the shaft.
- 13 Install gasket and end cover and secure with end cover screws.

# Model 22940-2001

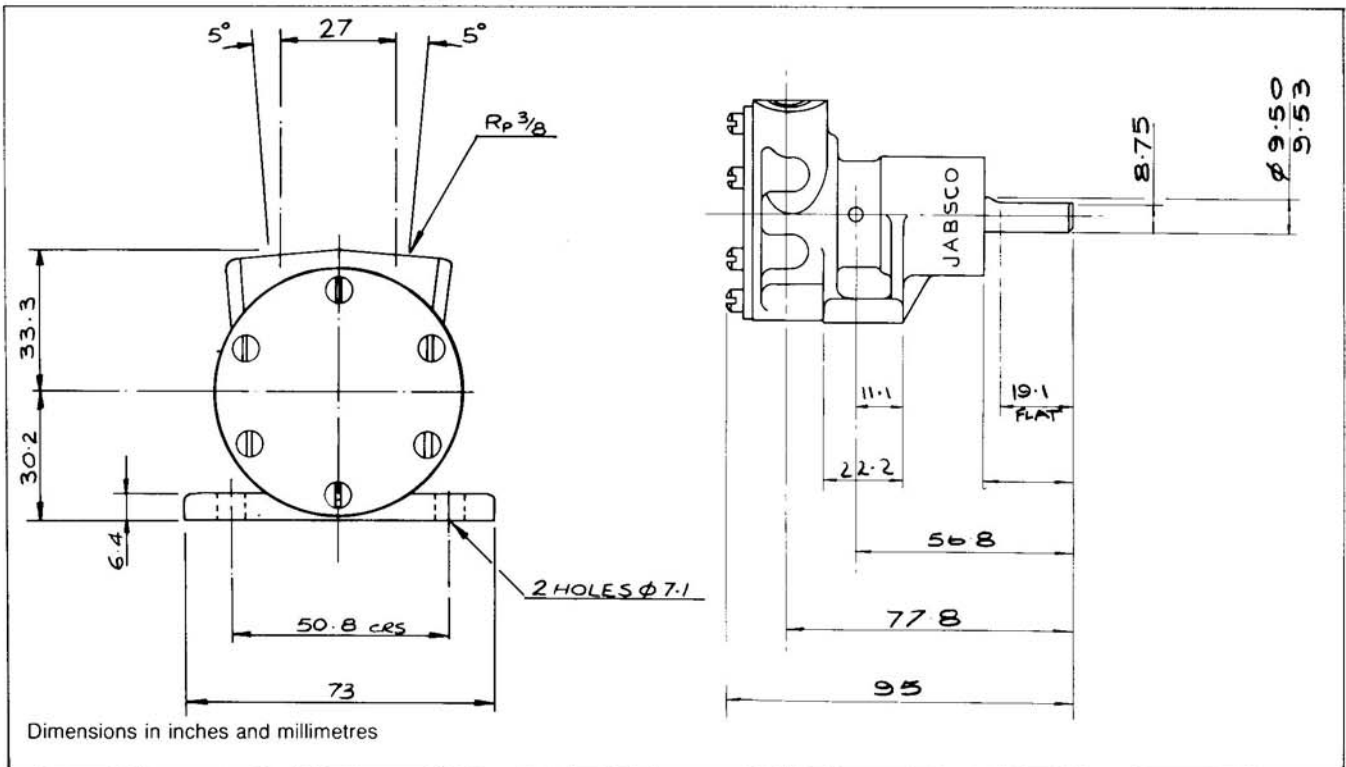
## OPERATING INSTRUCTIONS

- 1 Installation:** Pump may be mounted in any position. The rotation of the pump shaft determines the location of the pump's intake and discharge ports. Refer to dimensional drawing. Before starting, turn the pump shaft in the direction of the operating rotation.
- 2 Drive:** Belt Drive: Proper belt tension will give optimum performance and belt life. Direct Drive: Clearance should be left between drive shaft and pump shaft when installing coupling. Mount and align pump and drive shaft before tightening set screws. Flexible coupling recommended.
- 3 All pumps are self priming, ie. do not require to be filled with liquid to start up. If impeller is greased with petroleum jelly or wetted with liquid the pump will prime with a vertical suction lift up to 3m (based on water, specific gravity 1.0), but then must operate at minimum speed of 750-800 RPM.**
- 4 Running Dry:** Unit depends on liquid pumped for lubrication. Do not dry run for more than 30 seconds which is sufficient time for self-priming. Lack of liquid will cause deterioration of impeller.
- 5 Caution:** Do not pump light fraction petroleum derivatives, solvents, thinners, highly concentrated or organic acids. If it is necessary to pump these fluids with the standard Neoprene Impeller then pump life will be prolonged if flushed with water or neutralising agent after each operation.
- 6 Pressures:** For continuous operation, pressure should not exceed 1.4 bar (20 psi).
- 7 Temperatures:** Jabsco neoprene compound impellers are suitable for temperatures of 4-80°C.
- 8 Freezing Temperatures** Drain unit by loosening end cover. Most methyl alcohol (methanol) based anti-freezes can be used. Do not use petroleum based anti freeze compounds or rust inhibitors.
- 9 Gasket:** Use standard pump part. A thicker gasket will reduce priming ability. A thinner gasket will cause impeller to bind.
- 10 Spare Parts** A Jabsco Service Kit should be kept on hand to rebuild all but the most badly worn pumps.

**IMPORTANT SAFETY:** it is a requirement that the following are strictly adhered to:

1. Mechanical: all moving parts are adequately guarded to prevent accidental contact.
2. Electrical: (a) all wiring must be carried out by a qualified electrician. (b) when capacitors are employed in motor circuits they retain a charge after the supply has been isolated. This must be discharged before touching motor terminals to avoid the risk of an electrical shock.
3. Operational: before switching on, a check must be carried out to see that the installation conforms with local and national regulations, including mechanical and electrical requirements, by a suitably qualified person.
4. General: when pumping hazardous chemicals it is recommended that a suitable drip-tray is provided.

## DIMENSIONAL DRAWING



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Warranty: All products of the company are sold and all services of the company are offered subject to the company's warranty and terms and conditions of sale, copies of which will be furnished upon request.

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