Marine Pump Overview
### Oil Change

Oberdorfer Oil Change Pumps are ideal for dockside oil changes or for engine room use. Made of bronze with stainless steel shafts, they feature carbon bearings, spring loaded lip seals and are available in a choice of AC or DC motors.

**Features:**
- Rotary gear pumps
- Complete units available
- Slotted motor base with rubber grommets
- Continuous duty
- Pressures to 60 PSI
- Available with or without relief valve
- Helical gears for low noise
- O-Rings for better seal
- AC & DC Voltage

### Sewage Transfer

These pumps are a necessity in today’s effort to protect the purity in boating waterways. Both AC and DC units with and without macerators are available.

### Air Conditioning

#### Non-Priming Features:
- Stainless steel or monel shaft for marine use
- Teflon® barrier seal to protect motor bearings
- Carbon face mechanical pump seals
- Viton® or Chemlon pump seals available for solvent transfer
- Explosion proof motors available
- Will handle contaminated liquids
- A standard in the marine air conditioning industry

#### Self-Priming Features:
- Rubber impeller pumps
- Garden hose threads (external) & pipe threads (internal) port connections
- Impeller & cam easily replaced
- Shaft slinger protects motor bearings

### Engine Cooling

#### Features:
- Rubber impeller pump
- Teflon barrier seals protecting ball bearings
- Mechanical carbon ring, ceramic face main pump seal
- Two sealed ball bearings spaced for maximum load ability
- Shaft slinger for additional bearing protection

### Engine Cooling Generator Recirculating

**Features:**
- Centrifugal pumps
- Designed for pulley drive
- Heavy duty ball bearings
- Mechanical seal
- Handles contaminated liquids
- Quiet operation
- No lubrication required
- All bronze construction

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Ice-Making Pumps

Pumps that are used to generate liquid ice.

Features:
- Ice produced in this form
- can be stored
- apportioned
- measured
- pumped and applied as if dealing with a liquid mass
- Consistency of flowing water
- Cooling capacity is 10 times greater than chilled water

Bilge Pumping

Features:
- Rotary gear pumps
- High capacity
- Corrosion-resistant design
- Reversible 1" diameter shafts
- O-ring for better seal
- Helical gears are quiet

Other Applications for these pumps include:
Transfer pump for diesel fuel, lube oils; pressure pump for deck washdown, cleaning buoys & auxiliary steering pumps for barges

General Purpose

These pumps can be used for a variety of purposes, most common are water and mild chemical transfer. Just pick the size you need to do the job.

Features:
- Rubber impeller pumps
- PTFE barrier seals protecting ball bearings
- Mechanical carbon ring, ceramic face main pump seal
- Two sealed ball bearings spaced for maximum load ability
- Shaft slinger for additional bearing protection

Fuel Transfer

Getting fuel from one place to another is no problem for these high quality bronze gear pumps. Available in many different sizes, there’s one just right for your application.

Features:
- Bronze corrosion resistant castings
- Special cast bronze gears
- Stainless steel shafts and fasteners
- Formed ring seal packing (lip & mechanical seals on special order)
- Heavy duty carbon bearings (self lubricating)
- Positive displacement flow

Fire Pump or Ballast Transfer

Responding to fire emergencies with effective pumping equipment is crucial to any boat owner. These large capacity pumps get water to the problem quickly and efficiently.

Features:
- Rotary gear pump
- Self-lubricating carbon bearings
- Bronze construction
- Stainless steel shafts
- Suction lift of 20 ft.
- Self-priming
- Also available with relief valve
- O-ring for a better seal
- Helical gears are low noise

Baitwell

Baitwell recirculation pump is mounted below deck on stern; below water line for gravity flow with pump head down and motor above, so that any failure of seal will not allow seawater to drip on motor.

Features:
- Centrifugal pumps
- Corrosion resistant
- Compact, lightweight
- Bronze construction
- Stainless steel shaft
- Meets US Coast Guard Ignition Protection requirements. 33 CFR 183.410(R)

Features:
- Rubber impeller pumps
- NBR seal
- Stainless steel motor shaft
- Motor shaft slinger protects motor bearings
- Rubber motor grommets for noise isolation
- Impeller easily replaced
- Vacuum switch shut off optional
- Garden hose threads (external) & pipe threads (internal) for port connections

Features:
- Rubber impeller pumps
- Garden hose threads (external) & pipe threads (internal) port connections
- Impeller easily replaced
- Large vent openings separate pump & motor
- Motor shafts are stainless steel
- Shaft slinger protects motor bearings

Engineering Information

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<td>Plastic</td>
<td>Bronze</td>
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<td>Flow</td>
<td>0-175 GPM</td>
<td>0-100 GPM</td>
<td>0-55 GPM</td>
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<td>Pressure</td>
<td>0-150 PSI</td>
<td>0-60 PSI</td>
<td>0-40 PSI</td>
</tr>
<tr>
<td>Performance</td>
<td>Positive displacement. Little flow decrease with pump pressure increase. Flow increases with speed increase.</td>
<td>Flow drops to zero with maximum pressure output</td>
<td>Flow drops to zero with maximum pressure output</td>
</tr>
<tr>
<td>Suction Lift (Water)</td>
<td>0-20 ft below pump level</td>
<td>Zero for straight centrifugal. 15 feet with foot valve. Self priming models to 20 ft., is wet. Do Not Run Dry.</td>
<td>0-15 feet below pump level when impeller</td>
</tr>
<tr>
<td>Liquid Cleanliness and Viscosity</td>
<td>Close tolerances require clean liquids. Viscous liquids require lower pump speeds. Viscosity is to 50,000 SSU</td>
<td>Clean or contaminated. Cannot pump viscous liquids above 2000 SSU</td>
<td>Clean or contaminated viscous liquids up to 15,000 SSU require low or pump speed.</td>
</tr>
<tr>
<td>Liquid Compatibility</td>
<td>Most common liquids, compatible with chemicals &amp; diesel fuel.</td>
<td>Water, most common liquids &amp; sea water. Corrosive liquids water &amp; chemicals.</td>
<td>Not solvents or liquids harmful to neoprene or buna.</td>
</tr>
<tr>
<td>Noise</td>
<td>Bronze helical gears are quiet. FRS Plastic spur gears are quiet. Extremely quiet. From audible to quiet.</td>
<td>Least amount to start and operate; maximum amount at wide open flow and pressure. Power demand increases with pressure increase. Higher start-up power required, less in operation.</td>
<td></td>
</tr>
<tr>
<td>Power Required</td>
<td>Power demand increases with speed and pressure.</td>
<td>Okay to shut off for extended periods.</td>
<td>DO NOT SHUT OFF</td>
</tr>
<tr>
<td>Discharge Line</td>
<td>Positive displacement. Relief valve necessary to protect pump if shut off occurs.</td>
<td></td>
<td></td>
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<tr>
<td>Bearing &amp; Lubrication</td>
<td>Carbon Bearings - Require no lubrication</td>
<td>Ball Brgs No</td>
<td>Carbon Bearings - No Balance</td>
</tr>
<tr>
<td>Temperature</td>
<td>Carbon Brgs -40° to 300°F</td>
<td>-40 to 250°F</td>
<td>0° to 180°F</td>
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General Application Data

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<td>Air Conditioning (Self-Prime)</td>
<td>211D-04D26, 300B-F13/300B-F26</td>
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<td>201M, 202M-3, 202M-7, 202M-11, 202M-17, 335, 402M-03, 403M, 404M</td>
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<td>Ballastwell</td>
<td>170M-A81/170M-A82, 170M-A87, 201D-A85-12VOLT, 201D-A89-24VOLT, 201D-A90-32VOLT, 211D-04D28</td>
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<td>Fuel Transfer</td>
<td>N992Q-J99, N991, N992, N993, N994, N970, N950, N991-C81, N100</td>
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<td>Fire Pump or Ballast Transfer</td>
<td>N6000, N11HD/N13HD, N11500/N13500 (upper drive), N11510/N13500 (lower drive), N994-38, N970-38, N990-38, N11HD-02, N13HD-04</td>
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