



OBERDORFER PUMPS

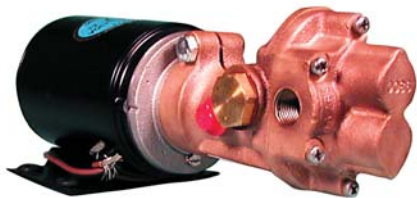
A Subsidiary of Thomas Industries Inc.



Marine Pump Overview

Oil Change

Oberdorfer Oil Change Pumps are ideal for dock-side 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.



DC Onboard Pump-out Features:

- Rubber impeller pumps
- All bronze construction
- Large vent openings separate pump and motor
- Motor shaft slinger protects motor bearings
- Rubber motor grommets for noise isolation
- Macerator wheel and impeller easily replaced

AC Onboard Pump-out (Portable or Stationary) Features:

- Rubber impeller pumps
- All bronze construction
- Motor shaft slinger protects motor bearings
- 3 conductor motor cord with feed thru "on" "off" switch
- Macerator wheel and impeller easily replaced

Gray Water Pump Features:

- Rubber impeller pumps
- Portable
- Compact
- Rubber impeller easily replaced
- Reversible wear plate
- Vacuum switch shut off optional

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



Features:

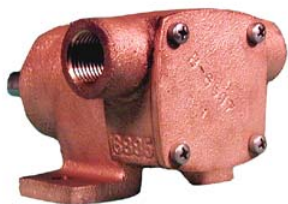
- Centrifugal Pumps
- Bronze construction
- Stainless steel shaft (F13) Monel shaft sleeve (F26)
- Built for continuous marine duty and maintenance free
- Self-priming, can suction lift to 15 ft., can be deck mounted
- Also available in pedestal mount - 30PB
- 1" NPT ports
- 1 & 3 ph, TEFC, ODP motors



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



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 bouys & auxiliary steering pumps for barges

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



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

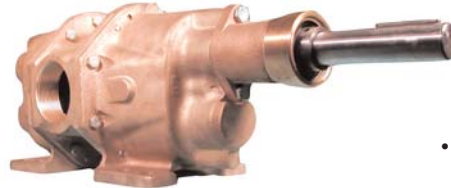


Fire Pump or Ballast Transfer

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

INDEX	ROTARY GEAR	CENTRIFUGAL		RUBBER IMPELLER
Materials	Bronze	Bronze	Plastic	Bronze
Flow	0 -175 GPM	0 -100 GPM	0-2.2 GPM	0-58 GPM
Pressure	0-150 PSI	0-60 PSI	0-20 PSI	0-40 PSI
Performance	Positive displacement. Little flow decrease with pump pressure increase. Flow increases with speed increase.	Flow drops to zero with maximum pressure output		Flow drops to zero with maximum pressure output
Suction Lift (Water)	0-20 ft. below pump level	Zero for straight centrifugal. 15 feet with foot valve. Self priming models to 20 ft.		0-15 feet below pump level when impeller is wet. Do Not Run Dry.
Liquid Cleanliness and Viscosity	Close tolerances require clean liquids. Viscous liquids require lower pump speeds. Viscosity is to 50,000 SSU	Clean or contaminated. Cannot pump visous liquids above 2000 SSU		Clean or contaminated viscous liquids up to 15,000 SSU require lower pump speed.
Liquid Compatibility	Most common liquids, compatible chemicals & diesel fuel.	Water, most common liquids & sea water.	Corrosive liquids w ater& chemicals.	Not solvents or liquids harmful to neoprene or buna.
Noise	Bronze helical gears are quiet. PPS Plastic spur gears are quiet.	Extremely quiet.		From evident to quiet
Power Required	Power demand increases with speed and pressure.	Least amount to start and operate; maximum amount at wide open flow and pressure. Power demand decreases with pressure increase.		Higher start-up power required, less when in operation.
Discharge Line	Positive displacement. Relief valve necessary to protect pump if shut off occurs.	Okay to shut off for extended periods.		DO NOT SHUT OFF
Bearing & Lubrication	Carbon Bearings - Require no lubrication	Ball Brgs No	Ball Brgs No	Carbon Bearings - No Bronze Brgs - Yes Ball Brgs - No
Temperature	Carbon Brgs -40° to 300° F	-40 to 250° F	0° to 180°F	40° to 140° F
Seal Arrangement	Packing, Lip & Mechanical	Lip & Mechanical	Mechanical	Lip & Mechanical

General Application Data

APPLICATIONS	PUMP MODELS
Oil Change	N991-32A96/N991R-32A96, N991-32A97/N991R-32A97, N991-32C81/N991R-32C81, N992-32C81/N992R-32C81, N992-32C82/N992R-32C82, N991-F41/N991R-F41, N992-F41/N992R-F41, N992-37F30
Sewage Transfer	209M-A92/209M-A94, 214M-F35, 405M-04M26, 405M-04, 406M-04, 406M-04N26, 406MK-04, 406MK-04N26, 406MG-03UGY
Air Conditioning (Non-Priming)	172B-26, 172B-27, 104M-F13, 104M-F26, 109MB-J19, 109-1-J26, 101M
Air Conditioning (Self-Priming)	211D-04D28, 300B-F13/300B1-F26,
Engine Cooling	201M, 202M-3, 202M-7, 202M-11, 202M-17, 335, 402M-03, 403M, 404M
Engine Cooling Generator Recirculating	60P, 50P-15/50P-35, 202M-11,
Ice Making	Stainless Steel S93516CB
General Purpose	301M, 305M, 401M, 501M
Bilge Pumping	501M
Baitwell	170M-A81/170M-82, 170M-A87, 201D-A88-12VOLT, 201D-A89-24 VOLT, 201D-A90-32VOLT, 211D-04D28
Fuel Transfer	N992Q-J09, N991, N992, N993, N994, N970, N990, N991-C81, N1100
Fire Pump or Ballast Transfer	N9000, N11HDM/N13HDM, N11500/N13500 (upper drive), N11510/N13500 (lower drive), N994-38, N970-38, N990-38, N11HDM-02, N13HDM-04