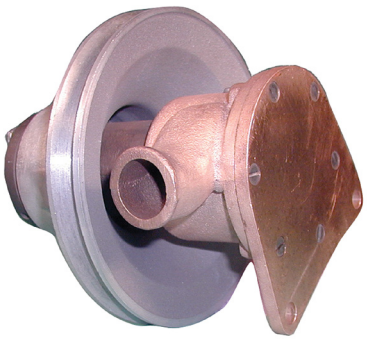
OBERDORFER®
An Ingersoll Rand Business

Model 402M
Bronze Pedestal Rubber Impeller Pump



Features

- Pipe Size: 1 1/4 I.D. Hose Slip On
- Bronze Construction - Corrosion Resistance
- Reversible Wearplate
- Polytetrafluoroethylene (PTFE) Barrier Seals Protecting Ball Bearings
- Mechanical Carbon Ring, Ceramic Face Main Pump Seal
- Two Sealed Ball Bearings Spaced for Maximum Load Ability
- Large Vent & Drain Openings Separate Seal & Bearing Areas
- Shaft Slinger for Additional Bearing Protection
- Neoprene Impeller
- High Chrome Nickel Stainless Steel Shaft
- O-Ring Seal Between Body and Cover Eliminates Gasket Problems
- Impeller & Cam Easily Replaced

Liquids and Temperature

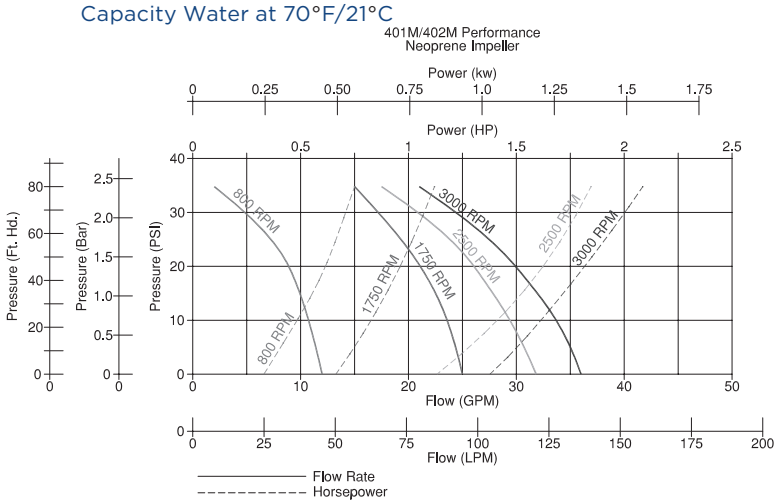
Liquids compatible with neoprene can be pumped including fresh and salt-water solution and mild chemicals. Do not pump severe solvents or acids. When possible, flush pump with fresh water after each usage. Extremes of cold and heat will affect impeller life. Limits of 40° to 180°F (4° to 82°C) should be observed. Do not allow liquid in pump to freeze. Drain pump by loosening cover screws. Use methyl alcohol based anti-freeze compounds such as Zerex, Shell Zone, Pyro Permanent, Permagard, or Dowgard.

Drive

Select proper belt size to match pulley groove as shown on dimension drawing on back.

Performance

Capacity Water at 70°F/21°C



Belt must run sufficiently tight to prevent slippage. Do not over tighten. Pump will operate satisfactorily when mounted in any position. Special mounting holes are provided as part of extended cover casting.

Direction of shaft rotation determines inlet and outlet ports (see dimension drawing). Prior to installation, rotate the pump manually in direction of rotation to set flexible blades in direction desired. Rubber impellers generate high rubbing friction unless lubricated by liquid being pumped. **DO NOT RUN DRY**. Lack of liquid will cause impeller to burn up.

The pulley is normally installed at the factory. If field service requires pulley removal and reinstallation, proceed as follows:

Pulley Removal: Loosen and remove the three three cap screws in the tapered steel bushing. Thread the three cap screws in the tapped removal holes, and progressively tighten each one until the aluminum pulley is loose on the tapered steel bushing. If the steel bushing won't slip off the pump shaft, wedge screwdriver blade in saw cut to expand and overcome tightness.

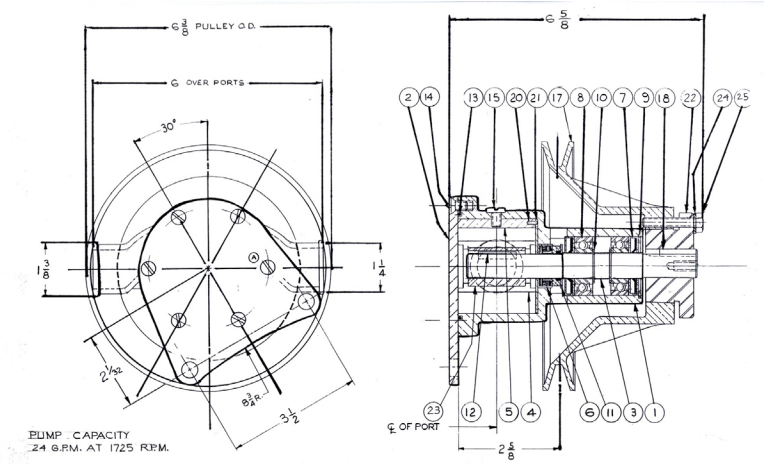
Pulley Installation: Align the pulley groove with the belt centerline. Tighten the three bushing cap screws drawing the tapered steel bushing into the aluminum pulley and thereby tightening the steel bushing onto the pump shaft. Tighten the screws evenly and progressively. This insures an even draw down to eliminate pulley wobble. **DO NOT** tighten each screw independently. The ultimate maximum recommended torque is 75 inch-lbs. Note: For two groove pulley, see OB402M-06 (7562) - consult factory.

Suction Lift

Suction lift of 15 ft. (4.6 m) is possible when impeller is wet. Suction lines must be air tight in order for pump to self-prime.

OBERDORFER®
An Ingersoll Rand Business

Exploded View and Parts List



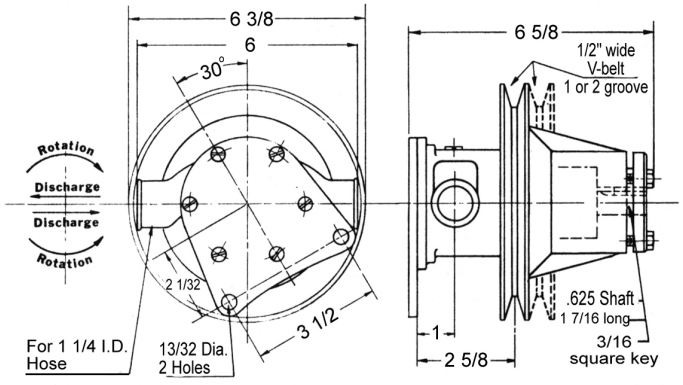
Designed for Daytona marine engine using Chevrolet blocks No. 327 and 427.
Designed for American Marine Ltd. using John Deere block No. JD6404 DR-15 and GMC block Toroflow 63701893.
Adaptable to other engines using these blocks.

	1	2	3	*4	5	*6
	Body	Cover	Shaft	Impeller	Cam	Seal Assy.
Pump No. / Reqd	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1
OB402M	OB6658	OB6659	OB6637	OB6603	OB6606	OB32230
OB402M-03	OB6658	OB6659	OB6637	OB6603	OB6606	OB32230

	7	8	9	10	11	12	*13	14	15	16	17	18	19	20	21	22	Repair Kit
	Lip Seal	Bearing	Snap Ring	Snap Ring	Washer	Key	O-Ring	Screw	Screw	Washer	Pulley	Key	Bush'g	Pin	Plate	Screw	
Pump No. / Reqd	Qty. 2	Qty. 2	Qty. 1	Qty. 2	Qty. 1	Qty. 1	Qty. 1	Qty. 6	Qty. 1	Qty. 3	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 3	
OB402M	OB6609	OB5928	OB5925	OB5926	OB6631	OB5475	OB6684	OB6775	OB7300-62	--	--	OB6567	--	OB6685	OB6635	--	OB10653
OB402M-03	OB6609	OB5928	OB5925	OB5926	OB6631	OB5475	OB6684	OB6775	OB7300-62	OB5016	OB6661	OB6567	OB6931	OB6685	OB6635	OB6958	OB10653

* Repair Kit contains items 4, 6 & 13 and seal installation tools: OB6751 pin (to occupy keyway and OB6752 bushing to protect seal from sharp edges)

Dimensions



Impeller Replacement

Replace the impeller if worn or damaged, causing low pressure, low flow, or engine overheating. Check V-belts for slippage, which can also reduce performance.

To replace, remove screws and cover, then pull out the impeller carefully. Align the key slot on the new impeller with the shaft key, use oil, and avoid forcing it on. Remove the impeller during storage to prevent blade deformation.

Seal Impeller Replacement

If water leaks from the weep hole or shaft area, the seal is defective and must be replaced. A leaky seal can damage ball bearings, causing pump failure and engine shutdown.

To replace the seal, remove and disassemble the pump. Mechanical seals require replacing both stationary and rotating parts. Lip seals must be pressed out and new ones installed with sealant. Refer to exploded view drawings for seal location and part numbers.

Ingersoll Rand
12500 South Pulaski Road
Alsip, IL 60803, USA
Phone (800) 448.1668