



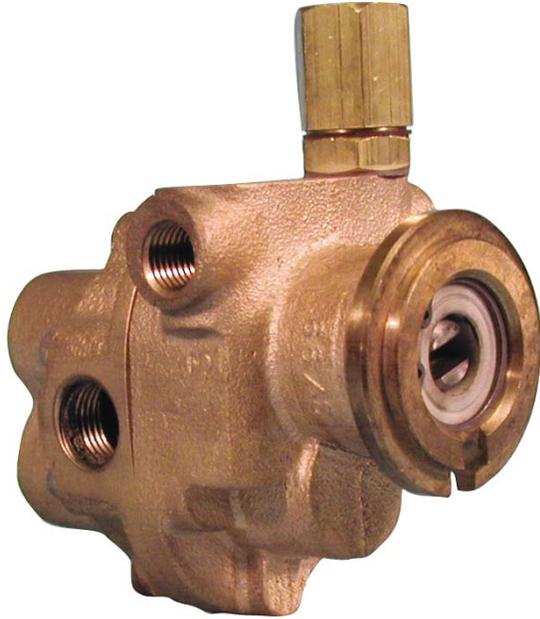
# OBERDORFER PUMPS

A Gardner Denver Product

## Carbonator Motor Mounted Bronze Rotary Gear Pumps

N91K61GEC

### 3/8" NPT Ports Standard



#### PERFORMANCE:

Capacity - Water 60° F 1725 R.P.M.

| Pump Series | PSI | 2   | 20  | 40  | 60  | 80  | 100 |
|-------------|-----|-----|-----|-----|-----|-----|-----|
| N91         | GPM | 2.1 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 |

#### FEATURES:

- Bronze Body, Stainless Steel Shafts
- Buna N Mechanical Seal
- Ryton®\* Gears
- Self-lubricating Carbon Bearings
- Alternative to Rotary Vane Pumps

#### GENERAL DESCRIPTION:

The carbonator motor mounting uses a circular clamp, similar to a hose clamp, as means of attaching the pump to a specially machined hub on the motor. This concept was first developed for the vending machine industry to pump carbonated beverages in soft drink dispensers. The main advantages are compactness and economy due to the elimination of the adapter casting. Carbonator motors are readily available from electric motor distributors.

The rotary gear pump features an all bronze design and 303 stainless steel shafts with options of non-metallic gears and a variety of shaft seals. The built-in relief valve is available in two options; internal recirculation to suction side or external connection for return line to supply tank.

#### SUCTION LIFT:

For a first start-up, the pump should be primed to avoid dry running. Gear pumps are self-priming, but a foot valve with strainer is recommended at the beginning of the suction line. This will keep the gear chamber primed to insure instant flow when the pump is started. Maximum suction lift is 20 feet. The suction line should be as short as possible.

#### LIQUIDS AND TEMPERATURE:

Bronze pumps are suitable for water, oil, and mild chemicals in the pH-range from 4-10. Viscous liquids may be handled with carbonator pumps up to a viscosity of 300 SSU. Higher viscosities require a pump speed lower than 1725 RPM, which is currently not available in carbonator motors.

Liquids containing abrasives, solids, powders or pigments are highly detrimental to pump life and must be avoided. The recommended liquid temperature range is from 32°F to 140°F. If more extreme temperature conditions exist, factory should be consulted. Allowing the liquid to freeze in the pump can cause damage.

#### ROTATION AND RELIEF VALVE:

The relief valve is not intended to be a metering or flow control device. Its main purpose is not intended to be a metering or flow control device. Its main purpose is to function as a discharge pressure relief when the spring tension is exceeded by the discharge pressure. Overheating can occur within 5-10 minutes if the discharge line is completely shut off for extended periods.

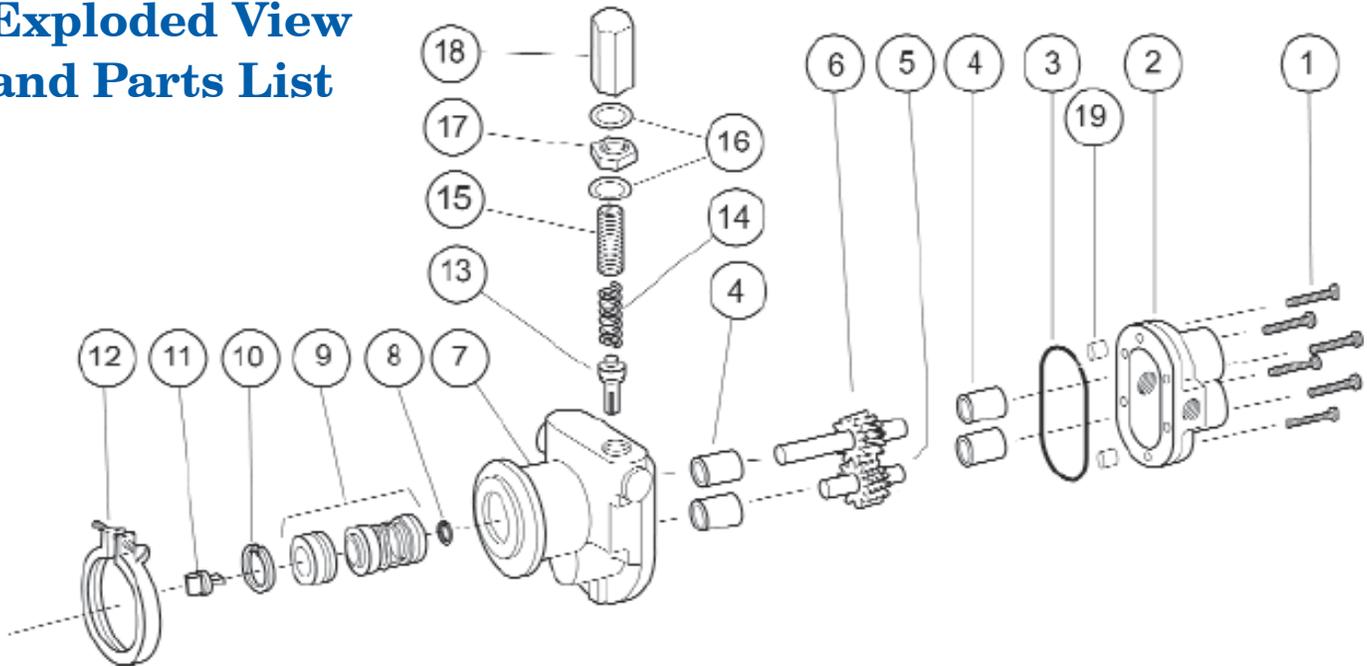
Unless otherwise specified, the pump motor unit is supplied by the factory for shaft rotation clockwise from shaft end. Reversing the motor rotation will reverse the "in" and "out" ports and also requires changing the relief valve location. The relief valve is always on the discharge side in this pump series. The factory pressure setting is 50 PSIG. To increase pressure, turn the relief valve adjusting screw in a clockwise direction.

To reverse single phase motors, find instructions on the inside of the junction box cover or on the name plate of the motor.

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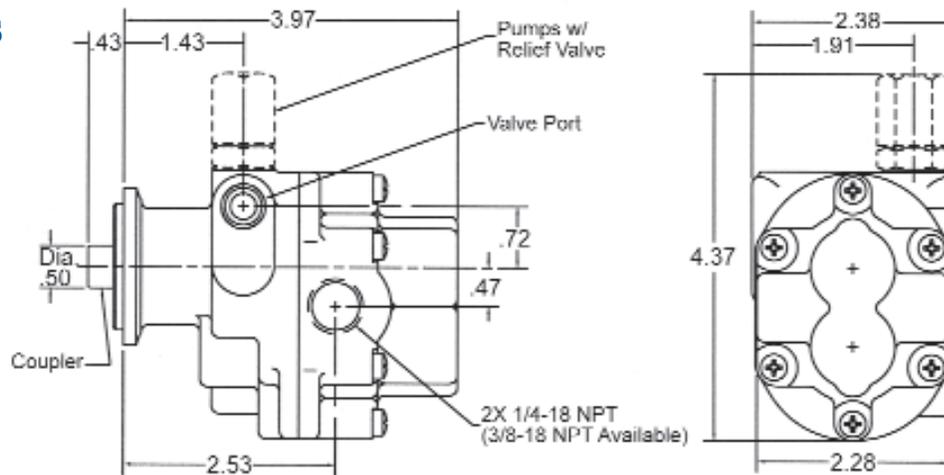
## Exploded View and Parts List



|           | 1      | 2        | 3*       | 4*      | 5*             | 6*              | 7        | 8         | 9*     | 10        | 11*     | 12     | 13     | 14     | 15            | 16       | 17       | 18        | 19**      |            |
|-----------|--------|----------|----------|---------|----------------|-----------------|----------|-----------|--------|-----------|---------|--------|--------|--------|---------------|----------|----------|-----------|-----------|------------|
|           | Screw  | Body     | O-ring   | Bearing | Idle Gear Assy | Drive Gear Assy | Cover    | Snap Ring | Seal   | Snap Ring | Coupler | Clamp  | Poppet | Spring | Adjust. Screw | O-ring   | Lock Nut | Valve Nut | Dowel Pin | Repair Kit |
| Model     | Qty. 6 | Qty. 1   | Qty. 1   | Qty. 4  | Qty. 1         | Qty. 1          | Qty. 1   | Qty. 1    | Qty. 1 | Qty. 1    | Qty. 1  | Qty. 1 | Qty. 1 | Qty. 1 | Qty. 1        | Qty. 2   | Qty. 1   | Qty. 1    | Qty. 2    |            |
| N91K61GEC | 7733   | 9300NC5N | 9797-033 | 5024    | 32403          | 32904           | 9305NN4R | 5373      | 32584  | 7639      | 9175    | 8840   | 7640   | 5806   | 5766          | 9797-015 | 5774D    | 5767      | 8885      | 11947      |
| N91K62GEC | 7733   | 9300NC5N | 9797-033 | 5024    | 32403          | 32914           | 9305NN4R | 5373      | 32584  | 7639      | 9175    | 8840   | 7640   | 5806   | 5766          | 9797-015 | 5774D    | 5767      | 8885      | 11947      |

\*Repair Kits contain items 3, 4, 5, 6, 9, 11  
 \*\*Items not shown

## Dimensions



\*Ryton® or equivalent PPS plastic will be used. Ryton® is a registered trademark of Phillips Petroleum Co.



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*A Gardner Denver Product*

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Visit [www.oberdorfer-pumps.com](http://www.oberdorfer-pumps.com) to find in-depth descriptions of the world's leading high-quality, dependable pumps.

Due to ongoing product improvements, data shown here is subject to change without notice. Contact Oberdorfer Pumps for latest specifications.

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