

# BRONZE ROTARY GEAR PUMPS CARBONATOR MOTOR MOUNTED

### GEAR PUMPS SERIES N91060GKC



### **FEATURES**

- · Bronze Body, Stainless Steel Shaft
- Nitrile Mechanical Seal
- Self-lubricating Carbon Bearings
- · Carbonator Motor Mount
- Bronze Spur Gear

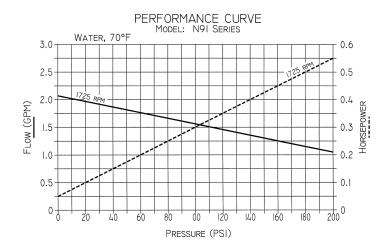
## **DRIVE**

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.

### 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 32oF to 140oF. If more extreme temperature conditions exist, factory should be consulted. Allowing the liquid to freeze in the pump can cause damage.

### **PERFORMANCE**



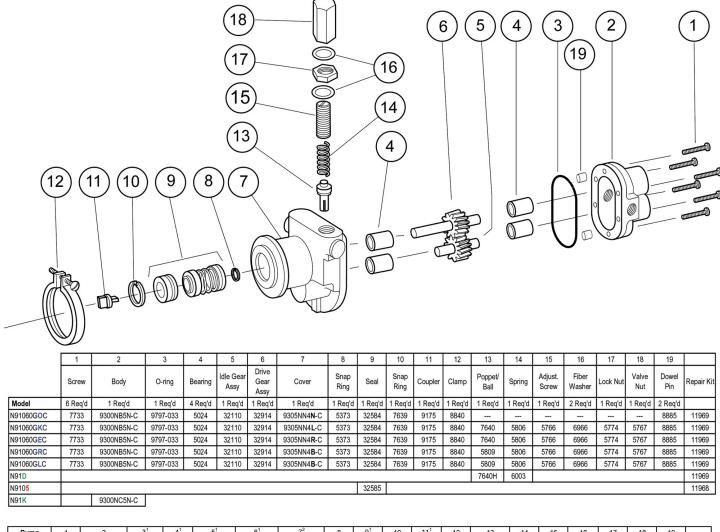
Capacity - Water 60° F 1725 R.P.M.

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

### **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.

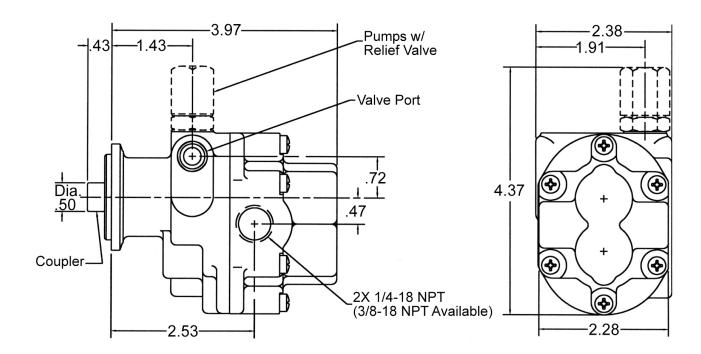
# **EXPLODED VIEW AND PARTS LIST**



Pump	1	2	3 <sup>1</sup>	4 <sup>1</sup>	5 <sup>1</sup>	6 <sup>1</sup>	7 <sup>2</sup>	8	9 <sup>1</sup>	10	11 <sup>1</sup>	12	13	14	15	16	17	18	19	
No.	Screw	Body	O-Ring	Bearing	Idle	Drive	Cover	Snap	Seal	Snap	Coupler	Clamp	Poppet/	Spring	Adjust.	Fiber	Lock	Valve	Dowel	Repair
					Gear Assy.	Gear Assy.		Ring		Ring			Ball		Screw	Washer	Nut	Nut	Pin	Kit
	6 Req'd	1 Req'd	1 Req'd	4 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	1 Req'd	2 Req'd	1 Req'd	1 Req'd	2 Req'd	
N91060GKC	7733	9300NB5N-C	9797-033	5024	32110	32914	9305NN4L-C	5373	32584	7639	9175	8840	7640/5809	5806	5766	6966	5774	5767	8885	11969

<sup>&</sup>lt;sup>1</sup> Repair Kits include items 3, 4, 5, 6, 9 & 11.

### **DIMENSIONS**



### **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.