

BRONZE ROTARY GEAR PUMPS CARBONATOR MOTOR MOUNTED

GEAR PUMPS SERIES N61K10G01



FEATURES

- Bronze Body
- Bronze Spur Gears
- Self-lubricating Carbon Bearings
- Nitrile Lip Seal - Optional fluoroelastomer Lip Seal
- Carbonator Motor Mount

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

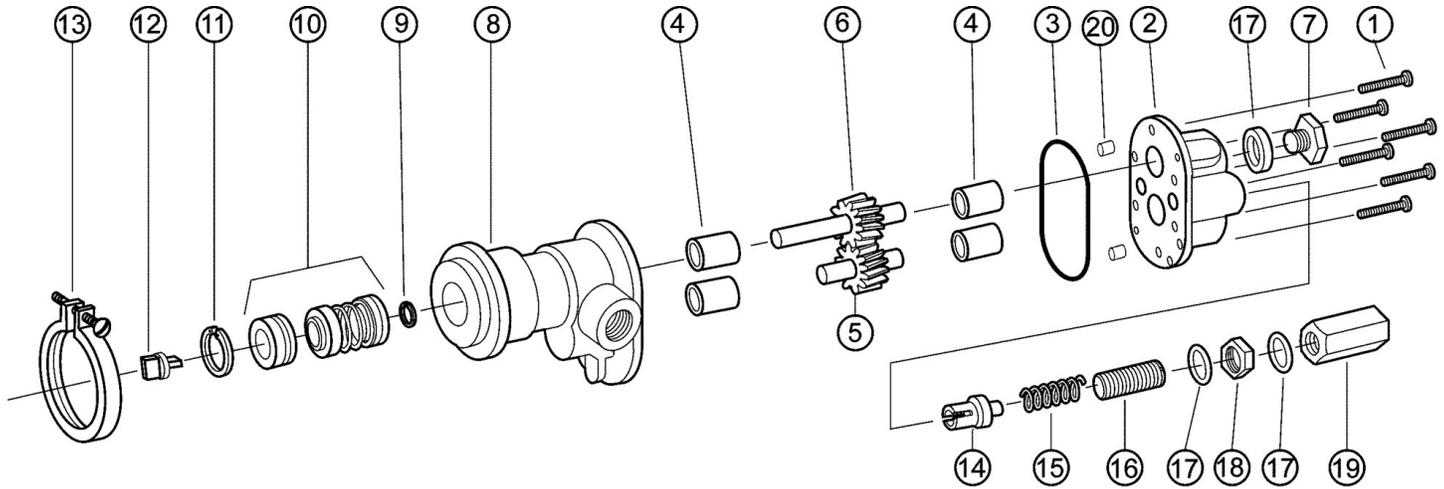
Capacity - Water 60° F 1725 R.P.M.

Pump Series	PSI	2	20	40	60	80	100
N61	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



Use Significant Numbering System above for Code Position descriptions.

Pump Model	1 Screw	2 Cover	3 O-Ring	4 Bearing	5 Idle Gear Assy.	6 Drive Gear Assy.	7 Plug Nut	8 Body	9 Snap Ring	10 Seal	11 Snap Ring	12 Coupler	13 Clamp	14 Poppet/ Ball	15 Spring	16 Adjust. Screw	17 Fiber Washer	18 Lock Nut	19 Valve Nut	20 Dowel Pins	Repair Kit ¹
N6101G0C (Pos. 1 "0")	(7)	(1)	(1)	(4)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(3)	(1)	(1)	(2)	8885 11626

OTHER VARIATIONS

Pos. 1 "K"								9312NC4N													
Pos. 2 "2"										7580											12112
Pos. 2 "5"								9312NB4N	5373	32585	7639										12113
Pos. 2 "6"								9312NB4N	5373	32584	7639										12114
w/Relief		9314NN5R							5775					7640/5809	5806	5766	6966	5774	5767		

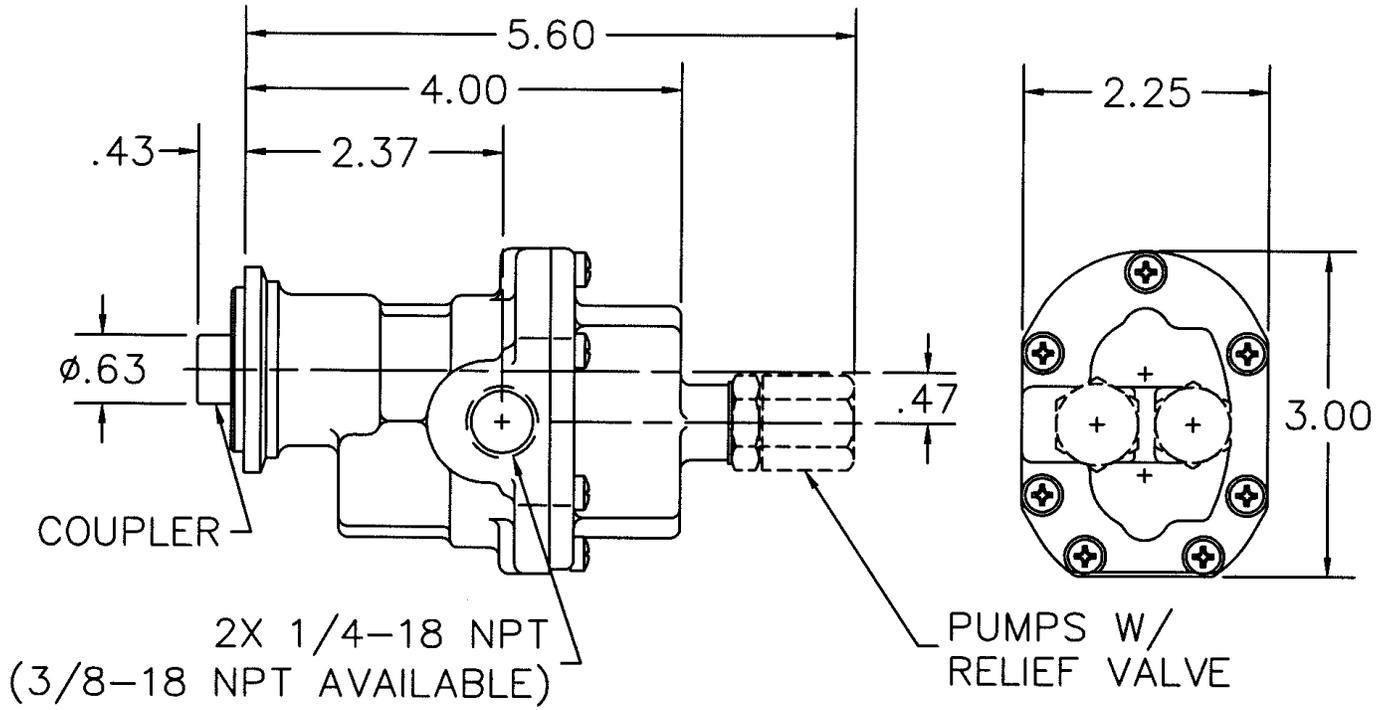
¹ Repair Kit includes items 3,4,5,6,10 and 12

Pump Model	5		6		Keys (2)
	Idle Gear	Spur Gears	Drive Gear		
Position 3 "1" (Ryton)	7849	7801	9174		9524

Pump Model	1 Screw	2 Cover	3 O-Ring	4 Bearing	5 Idle Gear Assy.	6 Drive Gear Assy.	7 Plug Nut	8 Body	9 Snap Ring	10 Seal	11 Snap Ring	12 Coupler	13 Clamp	14 Poppet/ Ball	15 Spring	16 Adjust. Screw	17 Fiber Washer	18 Lock Nut	19 Valve Nut	20 Dowel Pins	Repair Kit ¹
N61K10G01 - Buna	(7)	(1)	(1)	(2)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(3)	(1)	(1)	(2)	8885 11626
N61K20G01 - Viton	5385	9314NN5N	9797-033	5024	32110	32663	---	9312NC2N	---	5007	---	9036	8840	---	---	---	---	---	---	---	8885 12112

¹ Repair Kit includes items 3,4,5,6,10 and 12

DIMENSIONS



ROTATION AND RELIEF VALVE

The relief valve 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.

RELIEF

Code Letter	Type of Valve		Pressure Control		Flow Return		Valve Position	
	Poppet Valve	Ball Valve	Adjust. Setting	Fixed Setting	Internal Return	External Return	Right* Side	Left* Side
E	X		X			X	X	
F	X			X		X	X	
R		X	X		X		X	

*Facing pump shaft.

NUMBERING SYSTEM

Pump No.	Code Position 1		Code Position 2			Code Position 3		Code Position 4	Code Position 5	Code Position 6					
	Housing Mat'l	Shaft Mat'l	Seal Type	Seal Mat'l	Gear Material		Bearing Material			Relief Valve	Type of Mounting				
					Drive	Idle									
N61	0	Bronze	SS 303	1	Lip	Buna N	1	Ryton(R)*	Ryton(R)*	G	Carbon Graphite	0	No Valve	C	Carbonator Motor Mount
				2	Lip	Viton(R)*		(Spur)	(Spur)			R	See		
	K*	Bronze	SS 303	5	Mech.	Buna N	0	Bronze	Bronze			F	Form		
				6	Mech.	Viton(R)*		(Helical)	(Helical)			E	AP2161		

*Letter K in Code Position 1 denotes suction port and discharge port are 3/8-18 NPT instead of the standard 1/4-18NPT.

The above number specifies the pump only, add code F02 for a 1/3 HP, 115/230 Volt, 1725 RPM motor.

e.g.: N61K10G0C is a N61 with 3/8" ports, Buna N lip seal, bronze helical gears, no relief valve & carbonator motor mount.

