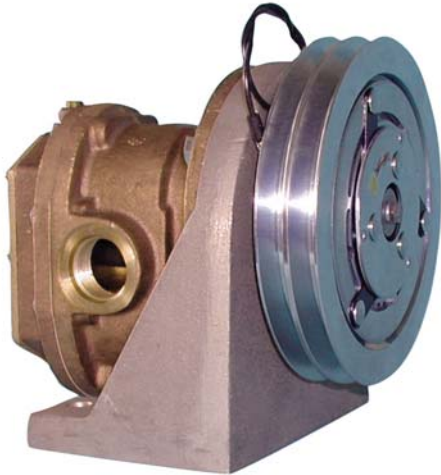


**CLUTCH-DRIVEN  
HIGH PRESSURE  
ROTARY GEAR PUMP**



**FEATURES**

- Bronze construction
- Hardened stainless steel shafts
- Stainless drive gear, bronze idle gear
- Heavy duty, hardened steel, sealed for life ball bearings
- Double row ball bearings for drive shaft provide added support for belt pulley loads
- 1 5/16 -12 JIC ports
- Stainless caged, teflon wedge reinforced, viton lip seals
- Integrated seal relief ports at suction side.
- Bottom threaded drain points allow visual indication of lip seal leakage, providing added protection for sealed bearings.
- Removable rear end plate for ready bearing inspection
- Rear cover with threaded jack bolt holes for easy removal.
- Removable lower front cover for access to idle bearing

**GENERAL DESCRIPTION**

This rugged pump incorporates sealed ball bearings isolated from the pump fluid via viton lip seals.

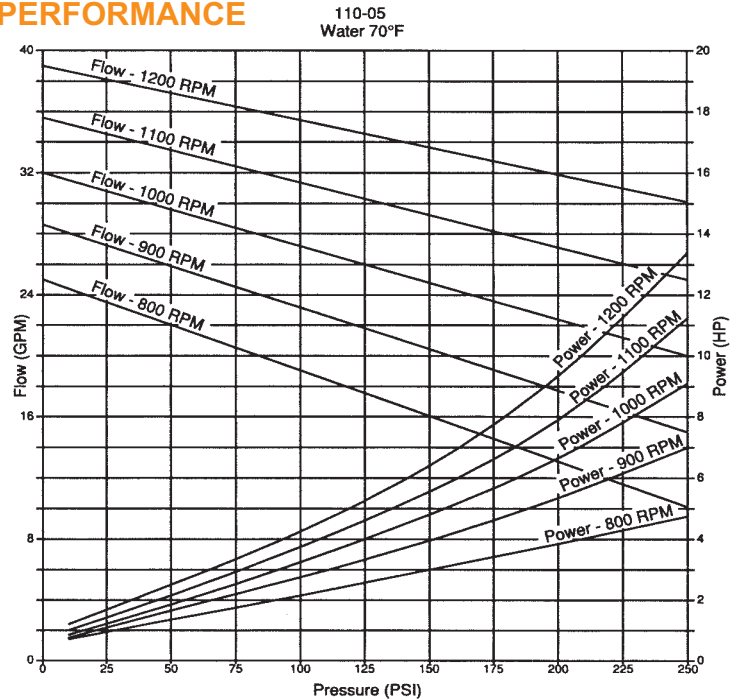
It incorporates a pedestal mounting pad and belt drive electric clutch actuators. Also available as a grease lubricated, flange mount pump. (see 110-05)

External rotary gear pumps are positive displacement pumps. Each shaft revolution displaces a definite amount of liquid relatively unaffected by the back pressure in the discharge line. shaft speed and flow are directly proportional.

**DRIVE ARRANGEMENT**

Given the suction side seal relief port orientation, these pumps are unidirectional. Shaft rotation is counter clockwise when viewing the pump from the drive shaft end. Maximum design speed is 1200 RPM.

**PERFORMANCE**



PRODUCT	PUMP REPAIR KIT	CLUTCH KIT	VOLTAGE	CLUTCH ONLY	COIL ONLY
110-12	11568	32238	12VDC	7227	7224
110-24	11568	33066	24VDC	7227	9902
110-32	11568	32239	32VDC	7227	7225

**LIQUIDS AND TEMPERATURE**

These pumps are suitable for all liquids that are compatible with bronze. Most common liquids are water, oil, and mild chemicals in the pH-range of 4 to 11. Viscous liquids require reduced shaft speeds of 1150 RPM or lower. Consult factory.

Liquids containing solids, abrasives, powders or paint pigments are definitely not recommended for gear pumps. If abrasives are unavoidable, use a very low shaft speed. The recommended liquid temperature range is 32° to 140°F for longest pump life. If more extreme temperature conditions exist, our factory should be consulted. Freezing of water-filled pumps can cause damage and must be avoided. Oils at low temperatures are very viscous requiring a lower speed or extra power.

**SUCTION LIFT**

As a general rule, the suction lift should be kept at an absolute minimum by placing the pump as close to the liquid as possible. A gear pump in new condition can lift 20 feet of water in the suction line. A foot valve (preferably with a built-in strainer) is recommended at the beginning of the suction line. For a first start-up, the pump should be primed to avoid dry running. Minimum size of the suction pipe is the size of the pump inlet port. For longer suction lines (over 3 feet), or for viscous liquids, the pipe size should be at least one size or two sizes larger than the pump inlet port.

\*Viton® is a registered trademark of DuPont Dow Elastomers. Viton® or equivalent FKM will be used.  
Teflon® is a registered trademark of DuPont. Teflon® or equivalent PTFE will be used.

# MODELS

110-12

110-24

110-32

## CLUTCH-DRIVEN HIGH PRESSURE ROTARY GEAR PUMP

### PARTS LIST

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	BODY	COVER	END PLATE	GEAR DRIVE	GEAR IDLE	DRIVE SHAFT	IDLE SHAFT	BALL BEARING	LIP SEAL	RETAINING RING	BEARING COVER	O-RING	GASKET PUMP	GASKET ENDPLATE	KEY
Pump No.	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 5	Qty. 4	Qty. 2	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1
110-12	6501	6506	6509	6800	6510	6968	6512	6332	6915	6513	6673	6672	6516	6517	6518
110-24	6501	6506	6509	6800	6510	6968	6512	6332	6915	6513	6673	6672	6516	6517	6518
110-32	6501	6506	6509	6800	6510	6968	6512	6332	6915	6513	6673	6672	6516	6517	6518

	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	SET SCREW	SPACER	FIL. HD. MACH. SCR.	HEX. HD. CAP SCR.	BRACKET	CLUTCH BODY	COIL 12 VOLT D.C.	BUSING	TRUSS HD. MACH SCR.	HEX. HD. CAP SCR.	WASHER	HEX. HD. CAP SCR.	KEY	WASHER (SHIM)	PIPE PLUG
	Qty. 2	Qty. 4	Qty. 8	Qty. 8	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 3	Qty. 1	Qty. 1	Qty. 5	Qty. 1	As Req'd	Qty. 1
110-12	6193	6955	5385	5670	6967	8556	72247	8570	7257	7656	8608	6561	6567	8580	6052
110-24	6193	6955	5385	5670	6967	8556	72247	8570	7257	7656	8608	6561	6567	8580	6052
110-32	6193	6955	5385	5670	6967	8556	72247	8570	7257	7656	8608	6561	6567	8580	6052

**NOTE: BARE PUMP WITH BRACKET (LESS CLUTCH) IS 110-08**

### DIMENSIONS

