

A Gardner Denver Product

Bronze or Aluminum Close Coupled Helical Rotor Pump 111 • 111B

Pipe Size 3/4"



FEATURES:

- All Bronze or Corrosion Resistant Aluminum Construction
- Carbon Face Mechanical Seal
- Quiet Running Pump
- Can Handle Contaminated Liquids
- Buna Stator and Stainless Steel Rotor
- Easily Mounted in Field to Standard Briggs Stratton or Tecumseh Engines

GASOLINE ENGINE MOUNTING:

This pump is supplied close coupled to gasoline engine or as a pump alone complete with attaching parts and instructions for mounting. Any 2 or 4 cycle gasoline engine having a standard SAE. 4 bolt mounting flange and 5/8" shaft diameter with keyslot can be used. An engine rating of at least 2.2 horsepower at 3600 RPM. is necessary as only about one-half of rated power is available at the recommended pump speed of 2100 RPM. Larger horsepower engines (3 HP at 3600 RPM) with 5/8" shaft diameter and suitable flange mounting provide extra power to compensate for power losses due to carbon deposits and gumming.

CHARACTERISTICS:

The turning of the helical shaped rotor within the stationary stator creates a progressing cavity similar to a moving piston. Liquid is thus displaced generating a pumping action.

Unlike piston pumping, extremely high pressure cannot be created because the stator is made of Buna N and is flexible. Because of this flexibility contaminated liquids can be handled.

Close fit of the rotor within the stator permits lifting of liquid on the suction side as high as 20 ft. High starting torque motors are recommended in order to overcome the high starting friction of the stator. The pump is relatively quiet.

ROTATION:

This helical rotor design demands a single rotation - clockwise when facing the pump drive shaft. Pump rotation and "in" and "out" ports are indicated on the dimension diagrams on reverse side.

MATERIALS OF CONSTRUCTION:

These pump housings and mounting brackets are made from cast aluminum or bronze alloy. The rotor is made from stainless steel with a hard chrome plate for improved wear properties. The stator is made from molded Buna N. The mechanical seal is a carbon and ceramic rotary face type for positive sealing.

LIQUIDS:

The corrosion resistant alloys used are compatible with common liquids including water, water solutions, oils and many commercial chemicals. Severe solvents are *not* compatible with the Buna and should not be pumped.

Pressure PSI	Flow GPM (Water)
0	10
10	9 1/2
20	9
30	8 1/2
40	8
50	7 1/2
60	7
70	6
80	5
90	4 1/2
100	4

Exploded View and Parts List



	1	2	3	4*	5*	6	7	8-9-10*	11	12	13	14	15*	16
_	Adapter Bracket	Body	Cover	Rotor	Stator	Drive Shaft	Universal Joint	Seal Assembly	Ball Bearing	Foot	Collar	Retaining Ring	Gasket	Spacer
Model	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 4
111 UGY	5871	5873	5872	5890	5891	5875	5874	32156	5884	5881	5886	5885	5882	5911
111B UGY	7213	6897	6896	5890	5891	5875	5874	32156	5884	5881	5886	5885	5882	5911

	17*	18*	20	21	22	23	24	25	26	27	28	29	30	31
	Pin	Pin	Nut	Plug	Screw	Key	Screw	Washer	Handle	Screw	Screw	Stud	Lug	Engine
Model	Qty. 1	Qty. 1	Qty. 1	Qty. 2	Qty. 14	Qty. 2	Qty. 2	Qty. 4	Qty. 1	Qty. 4	Qty. 2	Qty. 1	Qty. 4	Qty. 1
111 UGY	5888	5889	5597	5908	5897	5912	5916	5915	5919	5930	5595	5922	5921	7230
111B UGY	5888	5889	5597	5395	5897	5912	5916	5915	7402	5930	5595	5922	5921	7230

 \ast Repair Kit No. 10737 contains these parts and compression plate tool for seal removal

Dimensions



111 UGY & 111B UGY	Pump. No.	111 UGY & 111B UGY
13/16	L	11/32
4 9/16	М	1 9/16
11 1/4	N	4 3/16
20 17/32	0	15 1/2
2 1/16	Р	12 7/16
9 19/32	R	11/32
1 13/32	S	2 19/32
3 1/8	т	3 25/32
	111B UGY 13/16 4 9/16 11 1/4 20 17/32 2 1/16 9 19/32 1 13/32	Pump. No. 111B UGY 13/16 4 9/16 M 11 1/4 N 20 17/32 O 2 1/16 P 9 19/32 R 1 13/32

With Briggs & Stratton Engine No. 5/8 dia keyed shaft



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