

7/84

UNI- PUMPS

OBSOLETE

**WEINMAN
SELF-PRIMING
VORTEX
LIQUID RING
UNIPUMPS
TYPE Y**



For pumping liquid, air,
vapor, or any mixture of
the three. Heads to 170 feet,
flows to 70 GPM.



**Fluids Control Division
WEINMAN PUMP**

WEINMAN TYPE "Y" VORTEX LIQUID RING UNIPUMP IS THE MOST REVOLUTIONARY DEVELOPMENT IN THE PUMP INDUSTRY TODAY.

PUMPS LIQUID, AIR, VAPOR OR ANY MIXTURE OF THESE THREE!

WEINMAN'S unique self-priming pump is the only one of its type on the market today. It is simple in construction and completely foolproof in operation. Requires no priming chamber, no check or foot valves, no springs, belts, pistons or gears — just one moving part. The liquid pumped acts as a piston in the pump. There is no metal-to-metal contact, and no resulting wear on the casing. This means negligible wear and maintenance. The Type "Y" Liquid Ring Unipump has no pump bearings, requires no lubrication. Therefore, there can be no possible oil contamination when pumping pure liquids.

Amazingly versatile, the unique WEINMAN Type

"Y" Vortex Liquid Ring Unipump is ideal for many applications which no other pump can handle. Practically unlimited in scope of application, here are just some of the many pumping needs met by the WEINMAN TYPE "Y" Liquid Ring Pump. General Service High-Suction Lift Applications • Circulating Systems • Vacuum Heating Systems • Condensate Service • Household Water Service • Sanitary Drinking Water Supply • Bottle Washing • Priming Systems for Centrifugal Pumps • Vacuum Pump • Small Air Compressor • Small Boiler Feed Service • Volatile and Foaming Liquids • Non-Lubricating Liquids and many other pumping requirements which can be met by no other pump on the market today.

SECTIONAL VIEW

IMPELLER — rugged bronze casting accurately machined in complete radial and axial hydraulic balance, allowing it to float axially on the shaft, thus requiring no adjustment of clearance. (Impeller can also be furnished in cast iron or stainless steel.)

CASING — with threaded inlet and discharge connections, is a one piece cast iron casting accurately machined to receive impeller. Impeller and seal can be removed without disconnecting piping. Mounting flange has rabbet fit with bearing frame to insure perfect shaft alignment. (Casing, as well as casing cover, can be furnished in bronze or stainless steel.)

CASING COVER — cast iron, bolted to the casing with neoprene-coated gasket between faces.

MOTOR — single or three phase, drip proof. Totally enclosed or explosion proof with precision-machined stainless steel shaft.

MECHANICAL SHAFT SEAL prevents leakage under any vacuum or pressure application, and can be removed without disconnecting piping.

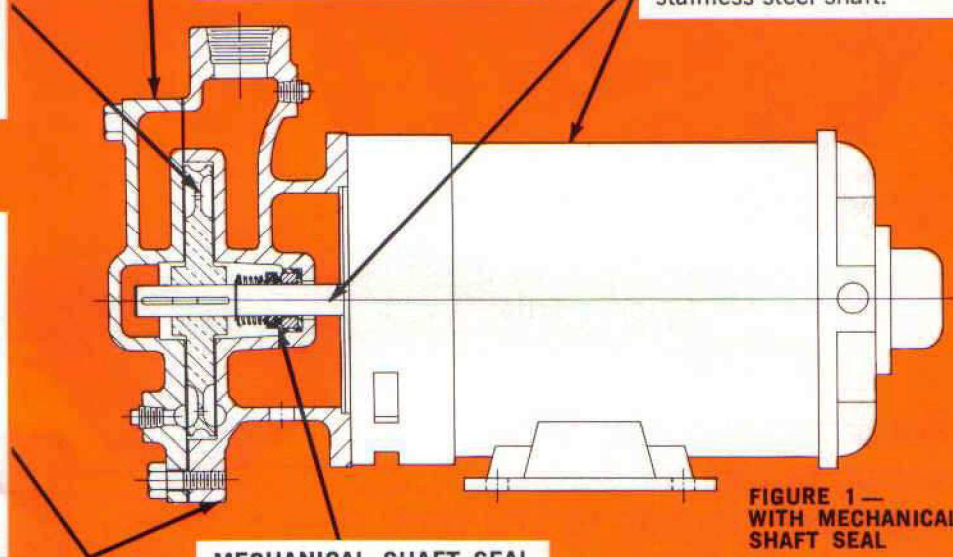


FIGURE 1 — WITH MECHANICAL SHAFT SEAL

WEINMAN TYPE "Y" VORTEX LIQUID RING UNIPUMP SELECTION TABLE

TOTAL DYNAMIC HEAD IN FEET

Based on clean, cold water and 1750 RPM speed motors*

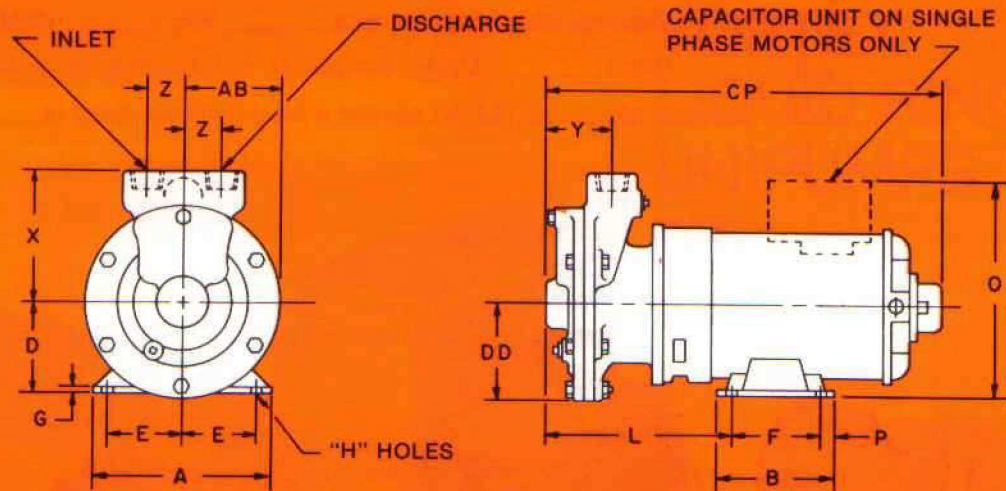
GPM	40	50	60	70	80	90	100	110	120	130	140	150	160	170
1-3	4Y10	4Y10	4Y10	4Y10	4Y10	4Y10	4Y10	4Y10	4Y10	4Y10	4Y10	4Y10	4Y10	
6	4Y7	4Y7	4Y7	4Y7	4Y7	4Y7	4Y7	6Y20	6Y20	6Y20	6Y20	6YH50	6YH50	6YH50
9	4Y7	4Y7	6Y20	6Y20	6Y20	6Y20	6Y20	6Y20	6Y20	6YH50	6YH50	6YH50	6YH50	6YH50
12	6Y15	6Y15	6Y15	6Y15	6Y15	6Y15	6Y15	6YH50	6YH50	6YH50	6YH50	6YH50	6YH50	6YH50
16	6Y15	6Y15	6Y15	6Y15	6Y15	6YH50	6YH50	6YH50	6YH50	6YH50	6YH50	6YH50	6YH50	
22	6Y15	6Y15	6YH50	6YH50	6YH50	6YH50	6YH50	6YH50	6YH50	6YH50	6YH50			
30	6YH50	6YH50	6YH50	6YH50	6YH50	6YH50	6YH50	6YH50						
40	6YH30	6YH30	6YH30	6YH30	6YH30									
50	6YH30	6YH30	6YH30											

KEY:

EXPLANATION OF MODEL NO. SYMBOLS: First No. is Size (Discharge) of Pump: 4 = 1", 6 = 1½", 8 = 2". Y and YH designate type of pump. Last No. is Horsepower of Motor: 7 = ¾ HP, 10 = 1 HP, 15 = 1½ HP, 20 = 2 HP, 30 = 3 HP, 50 = 5 HP. S and P designate Single or Polyphase motors.

*The addition of either S or P to model numbers designates Single or Polyphase motors.

PRINCIPAL DIMENSIONS



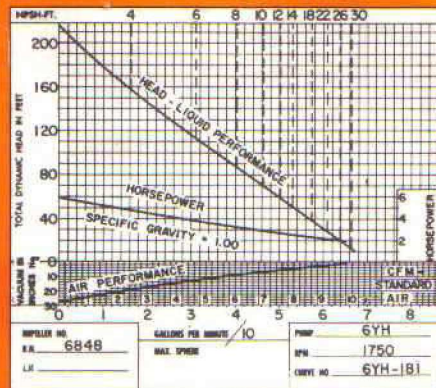
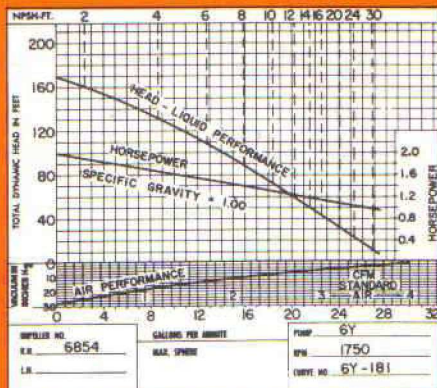
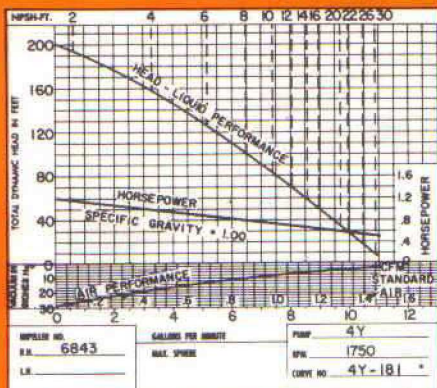
PUMP	Dis.	Inl.	A	B	CP	D	E	F	G	H	L	O	P	X	Y	Z	AB	DD
4Y5P	1	1	6½	4	14	3½	2⅞	3	⅛	1⅜	7⅞	6¾	½	5⅝	2⅝	1½	4	4
4Y5S	1	1	6½	4	14⅞	3½	2¾	3	⅛	1⅜	7⅞	9	½	5⅝	2⅝	1½	4	4
4Y7P	1	1	6½	4	14	3½	2⅞	3	⅛	1⅜	7⅞	6¾	½	5⅝	2⅝	1½	4	4
4Y7S	1	1	6½	4	14⅞	3½	2¾	3	⅛	1⅜	7⅞	9	½	5⅝	2⅝	1½	4	4
4Y10P	1	1	6⅝	5	15	3½	2¾	4	⅝	1⅜	7⅞	7¼	½	5⅝	2⅝	1½	4	4
4Y10S	1	1	6⅝	5	15	3½	2¾	5	⅝	1⅜	7⅞	9½	½	5⅝	2⅝	1½	4	4
4Y15P	1	1	6⅝	6	16	3½	2¾	5	⅝	1⅜	7⅞	7¼	½	5⅝	2⅝	1½	4	4
4Y15S	1	1	6⅝	6	16	3½	2¾	5	⅝	1⅜	7⅞	9½	½	5⅝	2⅝	1½	4	4
6Y15P	1½	1½	6⅝	6	16	3½	2¾	5	⅝	1⅜	7⅞	7¼	½	5⅝	2⅝	1½	4	4
6Y15S	1½	1½	6⅝	6	16	3½	2¾	5	⅝	1⅜	7⅞	9½	½	5⅝	2⅝	1½	4	4
6Y20P	1½	1½	6⅝	6	16	3½	2¾	5	⅝	1⅜	7⅞	7¼	½	5⅝	2⅝	1½	4	4
6Y20S	1½	1½	8⅝	5½	17⅞	4½	3¾	4½	⅝	1⅜	8⅞	9¼	½	5⅝	2⅝	1½	4	4
6Y30P	1½	1½	8⅝	5½	17⅞	4½	3¾	4½	⅝	1⅜	8⅞	9¼	½	5⅝	2⅝	1½	4	4
6Y30S	1½	1½	8⅝	6½	18⅞	4½	3¾	5½	⅝	1⅜	8⅞	11½	½	5⅝	2⅝	1½	4	4
6YH20P	1½	1½	6⅝	6	16¼	3½	2¾	5	⅝	1⅜	8⅞	7¼	½	5⅝	3⅝	1½	4⅞	4⅞
6YH20S	1½	1½	8⅝	5½	19⅞	4½	3¾	4½	⅝	1⅜	9⅞	11½	½	5⅝	3⅝	1½	4⅞	4⅞
6YH30P	1½	1½	8⅝	5½	19⅞	4½	3¾	4½	⅝	1⅜	9⅞	9¼	½	5⅝	3⅝	1½	4⅞	4⅞
6YH30S	1½	1½	8⅝	6½	20⅞	4½	3¾	5½	⅝	1⅜	9⅞	11½	½	5⅝	3⅝	1½	4⅞	4⅞
6YH50P	1½	1½	8⅝	6½	20⅞	4½	3¾	5½	⅝	1⅜	9⅞	9¼	½	5⅝	3⅝	1½	4⅞	4⅞

WEINMAN TYPE "Y" VORTEX LIQUID RING SELF-PRIMING UNIPUMP

The WEINMAN TYPE Y Pump is available in three sizes, with capacities to 70 gpm and pressures to 70 psi. It primes itself and has a maximum suction lift up to 28 feet, and produces its rated capacity despite air pockets or siphons in the suction line. Note the simple construction. Only one moving part means negligible wear and maintenance. Complete axial and radial balance of impeller

reduces bearing loads to a minimum. Impeller is keyed to shaft but is free to float axially and center itself in the casing, maintaining liquid films between its faces and the casing walls. Through this construction, there is no need for adjusting the impeller clearance. The impeller and mechanical seal may be removed from the pump without disturbing the suction and discharge piping.

PERFORMANCE CURVES FOR WEINMAN VORTEX LIQUID RING UNIPUMPS



ARCHITECTS' and ENGINEERS' SPECIFICATION FORM

Furnish and install as shown on plans a WEINMAN Model _____ Vortex Liquid Ring Unipump, close-coupled to a _____ HP, _____ RPM, _____ volt, _____ Hertz, _____ Cycle, horizontal, ball-bearing, drip-proof motor, with a capacity of _____ G.P.M. against a total dynamic head of _____ feet.

OTHER WEINMAN CENTRIFUGAL PUMPS

Designed for specific pumping requirements



General Purpose Unipumps



End Suction Pumps



Multi-stage Split-Case Pumps



Condensate Return Units



Sump Pumps and Non-Clog Sewage Ejectors



Submersible General Purpose and Non-clog Pumps



Split Case Pumps



Vertical Non-Clog Pumps

Whatever your pumping needs, consult your WEINMAN PUMP specialist for the fastest, most economical solution. Years of experience qualify him to recommend the right pump for best results. Consult the yellow pages of your telephone book for his name. Or, contact us for immediate assistance with all your pumping needs.



Fluids Control Division

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